Process

The Capital Improvements Program (CIP) is the County's plan for expenditures on facilities, equipment, and vehicles over the next five fiscal years. Capital improvements are separated from the annual operating budget because they include any proposed public construction, acquisition of land, buildings and accessory equipment, or vehicles or equipment with a unit cost greater than \$50,000. The Code of Virginia provides that a CIP be prepared to carry out policies adopted through the Comprehensive Plan. The CIP performs this function by outlining anticipated County projects by year, by cost and by recommended funding source. The Comprehensive Plan includes the Community Facilities Plan, which along with the CIP provides for capital improvements necessitated by growth for a twenty year period. Hanover County has maintained compliance with capital outlay programs as stated in Section 15.2-2239 of the Code of Virginia as follows:

"Local planning commissions to prepare and submit annually capital improvement programs to governing body or official charged with preparation of budget. -- A local planning commission may, and at the direction of the governing body shall, prepare and revise annually a capital improvement program based on the comprehensive plan of the locality for a period not to exceed the ensuing five years. The commission shall submit the program annually to the governing body, or to the chief administrative officer or other official charged with preparation of the budget for the locality, at such time as it or he shall direct.

The capital improvement program shall include the commission's recommendations, and estimates of cost of the facilities, including any road improvement and any transportation improvement the locality chooses to include in its capital improvement plan and as provided for in the comprehensive plan, and the means of financing them, to be undertaken in the ensuing fiscal year and in a period not to exceed the next four years, as the basis of the capital budget for the locality. In the preparation of its capital budget recommendations, the commission shall consult with the chief administrative officer or other executive head of the government of the locality, the heads of departments and interested citizens and organizations and shall hold such public hearings as it deems necessary."

The purpose of having a CIP is to assess the County's existing condition and identify needs which must be addressed to accomplish planning goals. A principal goal is to provide for the orderly and timed development of land consistent with the County's ability to provide services in accordance with the Comprehensive Plan.

The CIP sets forth needs and priorities to coordinate development of County facilities with anticipated revenues, growth and the community's ability to pay. By saying where public schools, water or sewer lines, drainage, and other improvements should be constructed, the County can encourage development in appropriate areas. "Appropriate" is used here to mean

consistent with adopted policies. This makes the CIP a key document in influencing and managing growth. The CIP is also an important tool in ensuring efficient use of limited financial resources. By reviewing anticipated revenues with anticipated capital needs, priorities can be established to ensure that essential public services can be continued and improved without interruption.

The CIP process is used to establish priorities between competing needs: 1) The County Departments recommend individual projects based on their needs assessment; 2) The Finance Department and County Administrator's office reviews and recommends proposals based on an assessment of community needs and financial resources available; 3) The Planning Commission reviews the recommendations and provides input to the Board of Supervisors; 4) The Board of Supervisors acts on the recommendations from public hearings, the County staff and the Planning Commission.

Financing

The Five-Year Financial Plan forecasts the anticipated expenditures, approximate timing, and source of funding for each project. The adoption of the CIP does not appropriate funds nor commit the Board to any expenditure in fiscal years two through five whereas fiscal year one is appropriated in conjunction with the Adopted Budget. The relationship between the CIP and the operating budget is carefully considered during the operating budget process. The CIP has three direct impacts on the operating budget: 1) Any projects funded with general fund resources must be evaluated with other needs for the competing resources for that year; 2) Any project funded with long term debt financing, must be in compliance with the debt policy and must anticipate the impact of the repayment of debt service on current and future years budgets; and 3) Implementation costs such as staffing and operating costs should be formulated. The following are the current CIP funding sources available to the County:

General Fund: Direct payments from the County's operating revenue.

General Obligation (GO) Bonds: Payments from the proceeds of the sale of General Obligation (GO) Bonds. These bonds must be approved by a general referendum of voters of the County, with the exception of Virginia Public School Authority (VPSA) bonds and State Literary Loans. GO bonds pledge the full faith and credit of the County for their repayment. VPSA bonds and State Literary Loans can only be issued for the financing of public school projects.

<u>Revenue Bonds</u>: Payments from the proceeds of the sale of Revenue Bonds. These bonds pledge the revenue generating potential of a facility or utility system.

<u>State and Federal Grants</u>: Payments from the State and Federal Government to provide facilities promoted by the State and Federal agencies.

<u>Public Utility Capacity Fees</u>: Fees associated with new water and sewer connections to obtain capacity in the utility system.

<u>Public Utility User Fees</u>: There may be certain utility projects which benefit the existing utility customer for which user fee charges are the appropriate funding source of the utility project.

<u>Savings Plan</u>: The County established a savings plan to mitigate the need for debt financing of school and/or County capital improvements. The savings plan is based upon designation of year-end General Fund surpluses and anticipated current fiscal year surpluses.

<u>Stormwater Fees</u>: The stormwater management program is funded by pro-rata fees charged to developers to fund appropriate stormwater management projects as a result of such development.

<u>MS4 Fees</u>: The revenue collected to support the control of the discharge of pollutants from the storm sewer system in order to protect the water quality in nearby streams, rivers, wetlands and bays.

New Facility Construction Cost Guide

Elementary, Middle and High Schools:

The County utilizes the Marshall Swift Valuation Index to provide square foot costs for new facilities. The Marshall Swift index is recognized nationally in evaluating construction costs based upon class and type of construction. The class component of the buildings define how well the building is constructed, with "A" being the best structurally built. Class A is a description of the quality and design of the building's exterior and interior. The square foot cost of a building is calculated using class and type with the cost adjusted by the local index multiplier and current multiplier. The local index multiplier adjusts for the variability in construction costs by region in the country and the current multiplier adjusts for inflation since class and type components were last valued. Therefore, the adjusted square foot cost represents a current square foot cost for the facility.

All schools in Hanover are excellent class A constructions. The schools have fireproof structural steel frames with reinforced concrete or masonry floors and roofs. The exterior walls are constructed of stone, brick, metal, glass, and are highly ornamental. The interior finish is made of plaster, glazed finishes, enamel, carpet, and vinyl. These types of schools have the best classroom lighting, cabling systems, and plumbing, including an elevator for high schools.

Marshall Swift Valuation Index

<u>Schools</u>	<u>Elementary</u>	<u>Middle</u>	<u>High</u>
Square Foot Cost	\$237.43	\$226.51	\$242.96
Local Multiplier	0.97	0.97	0.97
Current Multiplier	1.09	1.09	1.09
Adj. Sq. ft. Cost	\$251.03	\$239.48	\$256.88

Libraries

The libraries are good class A buildings. The libraries have masonry or concrete exterior walls and wood or steel roofs. The floors are made of concrete slab on grade. The exterior walls are made of special architecture metal and glass, face brick, stone, and concrete. The interior finish is constructed from the best plaster, carpeting, vinyl, and equipped with a kitchenette. Libraries have high-level lighting, audio-visual wiring, and good plumbing.

Marshall Swift Valuation Index

Libraries	
Square foot cost	\$236.39
Local Multiplier	0.97
Current Multiplier	1.05
Adj. Sq. ft. Cost	\$240.76

Fire Stations and Rescue Squads

The fire stations and rescue squads are good class A buildings. The buildings have masonry or ornamental block concrete exterior walls; wood or steel roofs and floor structures or concrete slab on grade for the floors. The interior finish has an office, classroom, kitchenette, drywall and acoustic tile. In these buildings there is good lighting, adequate plumbing, and restrooms.

Marshall Swift Valuation Index

Fire Stations & Rescue Square	<u>ds</u>
Square foot cost	\$239.00
Local Multiplier	0.97
Current Multiplier	1.05
Adj. Sq. ft. Cost	\$243.42

Sample Capital Improvement

Functional Area: The functional area is a group of related activities aimed at accomplishing a major service or regulatory program for which a locality is responsible.

Examples of functions are Judicial Administration, Public Safety, and Health and Welfare. This is located at the top of the form in the title box.

Department: The "Department" denotes the County (or School) department that has

oversight responsibility for the capital improvement. If applicable, other departments will provide their services to ensure that the capital

improvement meets all specifications, laws and budgetary controls.

Project: Denotes the project name.

Location: The physical address of where the capital improvement is to be located.

Countywide is used for location if the capital improvement is not

physically set (e.g. equipment) or maintained in one location.

Description/
Justification:

A brief description outlines the capital improvement and will contain the reasons behind the capital improvement and other pertinent information. Included in the description, if applicable, are the number of acres required, square feet of structure desired, feasibility studies, and design work status. For construction projects, a cost/sq. ft. will be provided and adjusted for inflation and continuous.

provided and adjusted for inflation and contingency.

Timetable: This is the date(s) anticipated that the capital improvement will be

acquired or completed. If construction of a capital improvement is required, the estimated starting and ending dates are noted. Request for Bid (RFB) or Requests for Proposals (RFP) with a vendor are required, with an appropriate contract awarded, in completing a capital

improvement. This is not provided for all projects.

Operating Impact: Operating impact will describe what effect, if any, the capital

improvement will have on the operating budget. Impacts are salaries/fringe benefits, operating and/or capital outlay. Only incremental impacts are shown in subsequent years as growth of base impacts are correlated to growth rates in Five-Year Financial Plan assumptions. Debt service impacts are shown in the Five-Year Financial Plan and the Indebtedness Section of the Budget document. Any reduced expenditures or increased revenues are also noted, if applicable. Generally, if the impact is less than \$5,000 it will be noted as \$0 as base

operating budget would be expected to absorb such costs.

Funding Uses: Funding uses represent, by fiscal year, the capital improvement

expenditures and the classification of such expenditures. Classifications are segregated as follows: professional, land, construction, EDP equipment, vehicles, and other. Total costs are rounded to the nearest

\$1,000.

		<u>FY14</u>		<u>FY15</u>		<u>FY16</u>		<u>FY17</u>		<u>FY18</u>	<u> </u>	Grand Total		General <u>Funds</u>	ı	ong-Term <u>Debt</u>		Other <u>Sources</u>
GENERAL GOVERNMENT ADMINISTRATION County Administration:																		
Time and Attendance System	\$	-	\$	208,000	\$	240,000	\$	-	\$	-	\$	448,000	\$	448,000	\$	-	\$	-
Total	\$	-	\$	208,000	\$	240,000	\$	-	\$	-	\$	448,000	\$	448,000	\$	-	\$	
Finance:																		
Legacy System Upgrades	\$	-	\$	335,000	\$	-	\$	-	\$	-	\$	335,000	\$	335,000	\$	-	\$	-
Total	\$	-	\$	335,000	\$	=	\$	-	\$	-	\$	335,000	\$	335,000	\$	-	\$	
Assessor:																		
Assessment CAMA System	\$	-	\$	350,000	\$	-	\$	-	\$	-	\$	350,000	\$	350,000	\$	-	\$	-
Total	\$	-	\$	350,000	\$		\$		\$		\$	350,000	\$	350,000	\$		\$	-
Information Technology:																		
Technology Infrastructure	\$	620,000	Ś	720,000	Ś	790,000	Ś	790,000	Ś	850,000	Ś	3.770.000	Ś	3,770,000	Ś	_	\$	_
Enterprise Licenses	•	220,000	•	235,000	•	240,000	•	240,000	*	240,000	•	1,175,000	,	1,175,000	,	_	•	_
Storage Area Network		80,000		80,000		80,000		450,000		80,000		770,000		770,000		_		_
		75,000		50,000		125,000		150,000		200,000		600,000		600,000				
County Fiber Symposium		73,000		30,000		123,000												_
County Fiber Expansion		-		-		-		225,000		225,000		450,000		450,000		-		-
Data Center Upgrades		-		404.000		-		150,000		75,000		225,000		225,000		-		-
Tax Parcel Data Enhancement		-		104,000		-		-		-		104,000		104,000		-		-
Ektron Enterprise Licensing Agreement Total	\$	995,000	ć	75,000 1,264,000	\$	1,235,000	ċ	2,005,000	<u>,</u>	1,670,000	٠	75,000	ċ	75,000 7,169,000	۲.	-	\$	
	\$ \$			2,157,000						1,670,000				8,302,000			\$	
Category Total	,	993,000	Ą	2,137,000	Ģ	1,475,000	۶	2,005,000	Ģ	1,670,000	Ģ	8,302,000	Þ	8,302,000	Ģ	-	Ģ	
PUBLIC SAFETY Sheriff: Records Management & Mobile Field	\$	-	\$	-	\$	685,000	Ś	-	\$	_	\$	685,000	Ś	685,000	Ś	-	\$	-
Reporting System													·					
Vaughan-Bradley Building HVAC Vaughan-Bradley Building Chiller Replacement		-		-		225,000		175,000		-		225,000 175,000		225,000 175,000		-		-
								175,000										
Firing Range Lead Removal		-		-		-		-		100,000		100,000		100,000		-		-
Vaughan-Bradley Building Elevator Cylinder Replacement		-		-		-		75,000		-		75,000		75,000		-		-
Total	\$	-	\$	-	\$	910,000	\$	250,000	\$	100,000	\$	1,260,000	\$	1,260,000	\$	-	\$	-
Emergency Communications:																		
Radio Replacement - Portable & Mobile	\$	-	\$	-	\$	1,250,000	\$	1,250,000	\$	500,000	\$	3,000,000	\$	3,000,000	\$	-	\$	-
CAD Replacement		956,000		_		-		-		-		956,000		956,000		-		-
Total	\$	956,000	\$	-	\$	1,250,000	\$	1,250,000	\$	500,000	\$	3,956,000	\$	3,956,000	\$	-	\$	-
Fire/EMS:			_		_		_				_				_		_	
Fire Engine & Heavy Squad Replacement	\$	250,000	\$	500,000	Ş	500,000	Ş	500,000	\$	750,000	Ş		Ş	2,500,000	Ş	-	\$	-
Ambulance Replacement	_	376,000	_	386,000	_	396,000	_	414,120		434,826	_	2,006,946	_	2,006,946	_	-	_	
Total	\$	626,000	\$	886,000	\$	896,000	\$	914,120	\$	1,184,826	\$	4,506,946	\$	4,506,946	\$	=	\$	-
Category Total	\$	1,582,000	\$	886,000	\$	3,056,000	\$	2,414,120	\$	1,784,826	\$	9,722,946	\$	9,722,946	\$	-	\$	-
PUBLIC WORKS Public Works:																		
Road Improvements	\$	1,250,000	\$	1,300,000	\$	1,350,000	\$	1,350,000	\$	1,500,000	\$	6,750,000	\$	1,750,000	\$	-	\$	5,000,000
Watershed Improvement Program		-		1,394,000		1,086,000		1,108,000		1,130,000		4,718,000		-		-		4,718,000
Subtotal	\$	1,250,000	\$	2,694,000	\$		\$		\$	2,630,000	\$	11,468,000	\$	1,750,000	\$	-	\$	9,718,000
			,		_		,		_		_		_		_		_	
Regional Stormwater Implementation	\$	164,700	\$	264,700	\$	-	\$	-	\$	-	\$	429,400	\$	-	\$	=	\$	429,400
Subtotal	\$	164,700	\$	264,700	\$	=	\$	-	\$	-	\$	429,400	\$	=	\$	-	\$	429,400

Solid Waste Services:		<u>FY14</u>		<u>FY15</u>		<u>FY16</u>		<u>FY17</u>		<u>FY18</u>	<u> </u>	Grand Total		General <u>Funds</u>	ı	Long-Term <u>Debt</u>		Other <u>Sources</u>
Solid Waste Equipment Replacement	\$	200,000	\$	100,000	\$	100,000	\$	190,000	\$	100,000	\$	690,000	\$	690,000	\$	-	\$	-
Subtotal	\$	200,000	\$	100,000	\$	100,000	\$	190,000	\$	100,000	\$	690,000	\$	690,000	\$	-	\$	-
													_					
Total	\$	1,614,700	\$	3,058,700	\$	2,536,000	\$	2,648,000	\$	2,730,000	\$	12,587,400	\$	2,440,000	\$	-	\$	10,147,400
General Services																		
General Vehicle Replacement Schedule	\$	125,000	\$	140,000	\$	200,000	\$	300,000	\$	300,000	\$	1,065,000	\$	1,065,000	\$	-	\$	-
Facility Maintenance		-		-		-		300,000		-		300,000		300,000		-		-
Telecommunications Switch Upgrades		-		150,000		-		-		145.000		150,000		150,000		-		-
HVAC Fan Units - Annex HVAC Air Handler Replacement		-		-		-		-		145,000 97,000		145,000 97,000		145,000 97,000		-		-
Elevator Cylinder Replacement (Wickham Bldg)		-		-		51,000		-		97,000		51,000		51,000		-		-
Ashland Library Roof Replacement						31,000				51,000		51,000		51,000				Ī
Total		125.000	ċ	290.000	ċ	251,000	ć	600,000	ć		ć	1,859,000	<u>,</u>		¢		ċ	
	\$	-,	•	,	\$,			\$	593,000	\$						\$	-
Category Total	<u>\$</u>	1,739,700	Ş	3,348,700	\$	2,787,000	\$	3,248,000	Ş	3,323,000	\$	14,446,400	\$	4,299,000	Ş	-	Ş :	10,147,400
PARKS, RECREATION AND CULTURAL																		
Parks and Recreation: Skate Park Repairs and Renovations	\$	50,000	\$	-	\$	-	\$	-	\$	-	\$	50,000	\$	50,000	\$	-	\$	-
Total	\$	50,000	Ś		\$		\$		\$		\$	50,000		50,000			\$	-
Category Total	<u> </u>	50,000			\$		\$		\$		\$	50,000		50,000			\$	-
· .	÷										Ė		·					
HUMAN SERVICES COMMUNITY SERVICES BOARD																		
RAFT House Purchase	\$	-	\$	-	\$	-	\$	-	\$	500,000	\$	500,000	\$	500,000	\$	-	\$	-
Total	\$	_	\$	-	\$	-	\$	-	\$	500,000	\$	500,000	\$	500,000	\$	-	\$	-
Category Total	\$		\$	-	\$		\$		\$	500,000	Ś	500,000	Ś	500,000	Ś		\$	
NON-DEPARTMENTAL	Ė									<u> </u>		<u> </u>		· ·	-			
Reserve for Revenue Transfers																		
Debt Capacity Reserve	\$	245,000	\$	511,203	\$	-	\$	559,859	\$	2,350,541	\$	3,666,603	\$	3,623,916	\$	-	\$	42,687
Reserve for Revenue Transfer		200,000		200,000		200,000		200,000		200,000		1,000,000		-		-		1,000,000
Total	\$	445,000	\$	711,203	\$	200,000	\$	759,859	\$	2,550,541	\$	4,666,603	\$	3,623,916	\$	-	\$	1,042,687
Category Total	\$	445,000	\$	711,203	\$	200,000	\$	759,859	\$	2,550,541	\$	4,666,603	\$	3,623,916	\$	-	\$	1,042,687
Total County Improvements Fund	\$	4,811,700	\$	7,102,903	\$	7,518,000	\$	8,426,979	\$	9,828,367	\$	37,687,949	\$	26,497,862	\$	-	\$:	11,190,087
AUDDONT																		
AIRPORT Airport:																		
East Side Taxiway Apron	\$	-	\$	490,000	\$	4,008,614	\$	4,008,614	\$	-	\$	8,507,228	\$	-	\$	-	\$	8,507,228
Airport Land Acquisition		-		-		=		1,281,942		-		1,281,942		-		-		1,281,942
Airport Improvements		174,950		-		-		-		-		174,950		3,499		-		171,451
Total Airport	\$	174,950	\$	490,000	\$	4,008,614	\$	5,290,556	\$	-	\$	9,964,120	\$	3,499	\$	-	\$	9,960,621
EDUCATION																		
School Board:											,							
Battlefield Park Elementary School	\$	-	\$	-	\$	-	\$		\$	15,600,000	\$	15,600,000	\$	-	\$	15,600,000	\$	-
Washington-Henry Elementary School		-		-		=		15,000,000		14 600 000		15,000,000		-		15,000,000		-
Henry Clay Elementary School Beaverdam ES Renovations		-		-		-		11,400,000		14,600,000		14,600,000 11,400,000		-		14,600,000 11,400,000		-
School Buses		-		2,040,000		2,065,000		2,780,000		3,113,000		9,998,000		9,998,000				-
Computer Replacement		1,820,000		1,550,000		1,637,000		1,670,000		1,520,000		8,197,000		8,197,000		-		-
Facilities Improvements		1,000,000		1,000,000		1,000,000		1,000,000		1,000,000		5,000,000		4,000,000		1,000,000		-
Total Education	\$	2,820,000	\$	4,590,000	\$	4,702,000	\$	31,850,000	\$	35,833,000	\$	79,795,000	\$	22,195,000	\$	57,600,000	\$	-
Total County, Airport, & Education						12,220,000		40,276,979				117,482,949				57,600,000		11 100 007
iotal County, Airport, & Education	>	7,031,700	Þ	11,092,903	Þ	12,220,000	Þ	40,276,979	Þ	45,661,367	Þ	117,482,949	Þ	48,092,862	Þ	57,000,000	Þ.	11,190,08/

PUBLIC UTILITIES	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	Grand Total	General <u>Funds</u>	Long-Term <u>Debt</u>	Other <u>Sources</u>
Water Source and Distribution Projects:									
Hanover-Richmond Joint Capital Water Contract	\$ 2,636,922	\$ 4,308,942	\$ 7,042,326	\$ 6,295,945	\$ 4,903,810	\$ 25,187,945	\$ - 9	-	\$ 25,187,945
Elmont Water Storage Tank and Booster Stn	-	697,000	_	2,955,000	-	3,652,000	-	3,652,000	-
New Ashcake Road Waterline Improvements	-	-	322,000	-	1,334,000	1,656,000	-	-	1,656,000
Cedar Lane Waterline Improvements	-	-	208,000	-	1,185,000	1,393,000	-	1,393,000	-
Chamberlayne Road Waterline Improvements	-	900,000	-	=	-	900,000	-	-	900,000
Water Tank Rehabilitation	-	110,000	350,000	75,000	295,000	830,000	-	-	830,000
Lockwood Pump Station Improvements	539,000	-	, -	-	, -	539,000	-	-	539,000
Walnut Grove Waterline Improvements	393,000	=	_	_	-	393,000	-	-	393,000
Powder Activated Carbon Feed System	-	=	_	354,000	-	354,000	-	-	354,000
Waterline Replacement	-	75,000	75,000	75,000	75,000	300,000	-	-	300,000
Water Treatment Plant Rehabilitation	_	75,000	75,000	75,000	75,000	300,000	_	-	300,000
Atlee Road Waterline Improvements	214,000	-	-	-	-	214,000	-	_	214,000
Rt. 360 at Bell Creek Rd Waterline Improvements		183,000	-	-	-	183,000	-	-	183,000
Quarles Rd. Water Facility Rehabilitations	-	162,000	-	-	-	162,000	-	-	162,000
Courthouse Water System Improvements	-	-	-	150,000	-	150,000	-	-	150,000
Dianne Ridge Water Treatment	39,000	102,000	-	-	-	141,000	-	-	141,000
Georgetown Wellhouse Rehabilitations	-	-	85,000	-	-	85,000	-	-	85,000
Race Course Street Waterline Improvements	70,000	=	-	-	-	70,000	-	-	70,000
Doswell WTP Basin Walkway & Loading Dock Rehab	66,000	-	-	-	-	66,000	-	-	66,000
Wastewater Collection and Treatment Projects:									
Totopotomoy WWTP Nutrient Removal Impr.	4,700,000	-	-	250,000	-	4,950,000	-	-	4,950,000
Henry Street Sewerline Rehabilation	636,000	=	-	-	-	636,000	-	-	636,000
Ashland Sewerline Rehabilitation - Area 2	=	=	-	-	532,000	532,000	-	-	532,000
AWWTP UV System Replacement	=	54,000	458,000	-	-	512,000	-	-	512,000
Doswell WWTP Equalization Tank Rehabilatation	-	-	-	510,000	-	510,000	-	-	510,000
DWWTP UV System Replacement	40,000	340,000	-	-	-	380,000	=	-	380,000
DWWTP Clarifier Weir and Baffle Replacement	-	-	20,000	189,000	-	209,000	-	-	209,000
Ashland Sewerline Rehabilitation - Area 3	-	-	202,000	-	-	202,000	-	-	202,000
Beaverdam WWPS Pump Control Panel Replacement	-	-	-	-	200,000	200,000	-	-	200,000
Ashland Sewerline Rehabilitation - Area 1	191,000	-	-	-	-	191,000	-	-	191,000
Quarles Road WWPS Pump Replacement	-	180,000	-	-	-	180,000	-	-	180,000
CHSTP Aeration Tank Rehabilitation	18,000	153,000	-	-	-	171,000	-	-	171,000
AWWTP Polymer Control Panel	-	-	-	-	160,000	160,000	-	-	160,000
TWWTP UV Panel Replacement	-	142,000	-	-	-	142,000	-	-	142,000
AWWTP Annunciator Panel Equalization Controller	137,000	-	-	-	-	137,000	-	-	137,000
DWWTP Digester Blowers and Enclose Rplc	=	=	-	-	126,000	126,000	-	=	126,000
Pamunkey Lift Station Pump Replacement	-	-	-	-	122,000	122,000	-	-	122,000
Hanover Lift Station Pump Replacement	-	-	-	119,000	-	119,000	-	-	119,000
Beaverdam WWPS Divider Gate Replacement	-	-	93,000	-	-	93,000	-	-	93,000
Shelton Pointe Pump Station Upgrade	-	-	-	-	85,000	85,000	-	-	85,000
Snead Street WWPS Pump Replacement	-	-	77,000	-	=	77,000	-	-	77,000
Air Park WWPS Generator Replacement	-	-	-	73,000	-	73,000	-	-	73,000
AWWTP Belt Press Rehabilitation	-	69,000	-	-	-	69,000	-	-	69,000
Hardees WWPS Pump Replacement	-	59,000	-	-	-	59,000	-	-	59,000
Other Projects:									
Vehicle Replacement	547,000	-	-	-	250,000	797,000	-	-	797,000
Equipment Replacement Total Public Utilities	\$ 10,226,922	171,000 \$ 7,780,942	\$ 9,007,326	59,000 \$ 11,179,945	\$ 9,342,810	230,000 \$ 47,537,945	\$ - 5	5,045,000	230,000 \$ 42,492,945
GRAND TOTAL	\$ 18,033,572			\$ 56,747,480	\$ 55,004,177	\$ 174,985,014	\$ 48,696,361	62,645,000	\$ 63,643,653



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		FY14		FY15		<u>FY16</u>		FY17		FY18	9	Grand Total
JMMARY OF FUNDING SOURCES:												
GENERAL FUND:		4 020 000		4 500 000	,	4 702 000		5 450 000		F 633 000		22 405 000
School Improvements Fund	\$	1,820,000	\$	4,590,000	\$	4,702,000	\$	5,450,000	\$	5,633,000	\$	22,195,000
County Improvements Fund		3,447,000		4,201,516		5,232,000		6,118,979		7,498,367		26,497,862
Airport Fund		3,499		-		-		-		-		3,499
Utility Fund TOTAL GENERAL FUND	Ś	5,270,499	\$	8,791,516	\$	9,934,000	Ś	11,568,979	\$	13,131,367	\$	48,696,361
TOTAL GENERAL FOND	٠,	3,270,433	۰	0,731,310	7	3,334,000	,	11,300,373	۰	13,131,307	٠	46,030,301
LONG-TERM DEBT:												
School Improvements Fund	\$	1,000,000	\$	-	\$	-	\$	26,400,000	\$	30,200,000	\$	57,600,000
County Improvements Fund		-		-		-		-		-		-
Airport Fund		-		-		-		-		-		-
Public Utilities Fund		-		697,000		208,000		2,955,000		1,185,000		5,045,000
TOTAL DEBT FUNDING	\$	1,000,000	\$	697,000	\$	208,000	\$	29,355,000	\$	31,385,000	\$	62,645,000
OTHER SOURCES:												
School Improvements Fund	\$	-	\$	_	\$	_	\$	_	\$	_	\$	_
County Improvements Fund	,	1,364,700	т.	2,901,387	т.	2,286,000	*	2,308,000	-	2,330,000	•	11,190,087
Airport Fund		171,451		490,000		4,008,614		5,290,556		_,555,555		9,960,621
Public Utilities Fund		10,226,922		7,083,942		8,799,326		8,224,945		8,157,810		42,492,945
TOTAL OTHER SOURCES	\$	11,763,073	\$	10,475,329	\$	15,093,940	\$	15,823,501	\$	10,487,810	\$	63,643,653
	_	40.000.570		40.052.045	_	25 225 242		EC 747 400			_	474 005 044
TOTAL FUNDING SOURCES	<u>\$</u>	18,033,572	\$	19,963,845	\$	25,235,940	\$	56,747,480	\$	55,004,177	Ş	174,985,014
SUMMARY BY FUNCTION:												
General Government Administration	Ś	995.000	Ś	2,157,000	Ś	1,475,000	Ś	2,005,000	Ś	1,670,000	Ś	8,302,000
Public Safety	,	1,582,000	т.	886,000	7	3,056,000	*	2,414,120	-	1,784,826	7	9,722,946
Public Works		1,739,700		3,348,700		2,787,000		3,248,000		3,323,000		14,446,400
Human Services		-		-				-		500,000		500,000
Parks, Recreation and Cultural		50,000				_		_		300,000		50,000
Non-Departmental		445,000		711,203		200,000		759,859		2,550,541		4,666,603
Education		2,820,000		4,590,000		4,702,000		31,850,000		35,833,000		79,795,000
Airport		174,950		490,000		4,008,614		5,290,556		-		9,964,120
Public Utilities		10,226,922		7,780,942		9,007,326		11,179,945		9,342,810		47,537,945
TOTAL BY YEAR	Ś	18,033,572	Ś	19,963,845	\$	25,235,940	\$	56,747,480	\$	55,004,177	Ś	174,985,014
	<u> </u>				<u> </u>		<u> </u>	50,7 1.7,100		55,65 1,277		
Summary by Fund:												
School Improvements Fund	\$	2,820,000	\$	4,590,000	\$	4,702,000	\$	31,850,000	\$	35,833,000	\$	79,795,000
County Improvements Fund		4,811,700		7,102,903		7,518,000		8,426,979		9,828,367		37,687,949
Airport Fund		174,950		490,000		4,008,614		5,290,556		-		9,964,120
Public Utilities Fund		10,226,922		7,780,942		9,007,326		11,179,945		9,342,810		47,537,945
	\$	18,033,572	\$	19,963,845	\$	25,235,940	\$	56,747,480	\$	55,004,177	\$	174,985,014
FUNDING ANALYSIS:												
General Funded % of County/School Projects		69%		75%		81%		29%		29%		41%
Other Sources Funded % of County/School Projects		18%		75% 25%		19%		6%		29% 5%		10%
**		18% 87%		100%		19%		34%		5% 34%		10% 51%
Total Non-Debt Funding %				100%		100%		34% 66%				51% 49%
Total Debt Funding %		13%		υ%		0%		66%		66%		49%

		<u>FY14</u>		<u>FY15</u>		<u>FY16</u>		<u>FY17</u>		<u>FY18</u>	9	Grand Total
FUNDING SOURCES												
COUNTY IMPROVEMENTS FUND General Fund	\$	3,447,000	\$	4,201,516	ċ	5,232,000	ċ	6 119 070	خ	7 400 267	ć	26,497,862
Other Sources	Ş	1,364,700	Ş	2,901,387	Ş	2,286,000	Ş	6,118,979 2,308,000	Ş	7,498,367 2,330,000	\$	11,190,087
Total Capital Improvements Fund	\$	4,811,700	\$	7,102,903	\$	7,518,000	\$	8,426,979	\$	9,828,367	\$	37,687,949
rotal capital improvements i unu		4,011,700	7	7,102,303	Ψ.	7,510,000	<u> </u>	0,420,575	7	3,020,307	7	37,007,545
SCHOOL IMPROVEMENTS FUND												
General Fund	\$	1,820,000	\$	4,590,000	\$	4,702,000	\$	5,450,000	\$	5,633,000	\$	22,195,000
Long-Term Debt		1,000,000		-		-		26,400,000		30,200,000		57,600,000
Total School Improvements Fund	\$	2,820,000	\$	4,590,000	\$	4,702,000	\$	31,850,000	\$	35,833,000	\$	79,795,000
AIRPORT FUND												
General Fund	\$	3,499	\$	-	\$	-	\$	-	\$	_	\$	3,499
Other Sources		171,451		490,000		4,008,614		5,290,556		-		9,960,621
Total Airport Fund	\$	174,950	\$	490,000	\$	4,008,614	\$	5,290,556	\$	-	\$	9,964,120
UTILITY FUND												
Long-Term Debt	\$	_	\$	697,000	\$	208,000	ς	2,955,000	Ś	1,185,000	\$	5,045,000
Other Sources	Ψ.	10,226,922	Y	7,083,942	Y	8,799,326	Y	8,224,945	Y	8,157,810	Y	42,492,945
Total Public Utilities Fund	\$	10,226,922	\$	7,780,942	\$	9,007,326	\$	11,179,945	\$	9,342,810	\$	47,537,945
TOTAL CAPITAL IMPROVEMENTS FUNDS												
General Funds	\$	5,270,499	\$	8,791,516	\$	9,934,000	\$	11,568,979	\$	13,131,367	\$	48,696,361
Long-Term Debt		1,000,000		697,000		208,000		29,355,000		31,385,000		62,645,000
Other Sources		11,763,073		10,475,329	Ś	15,093,940	Ś	15,823,501		10,487,810		63,643,653
Total Capital Improvements Fund	<u>\$</u>	18,033,572	Þ	19,963,845	Þ	25,235,940	Þ	56,747,480	\$	55,004,177	Þ	174,985,014
DETAIL OF OTHER SOURCES												
County Improvements Fund												
Reserve for Revenue	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	1,000,000
State Revenue		1,000,000		1,000,000		1,000,000		1,000,000		1,000,000		5,000,000
Prior Year CIP Fund Balance		-		42,687		-		-		-		42,687
User Fees - MS4 Compliance		-		1,394,000		1,086,000		1,108,000		1,130,000		4,718,000
Stormwater Fees		164,700		264,700		-		-		-		429,400
Total Other Sources	\$	1,364,700	\$	2,901,387	\$	2,286,000	\$	2,308,000	\$	2,330,000	\$	11,190,087
Airport Fund												
State Revenue	\$	13,996	\$	15,000	\$	122,713	\$	161,956	\$	_	\$	313,665
Federal Revenue		157,455	•	475,000	•	3,885,901	•	5,128,600		_	•	9,646,956
Total Other Sources	\$	171,451	\$	490,000	\$	4,008,614	\$	5,290,556	\$	-	\$	9,960,621
Public Utilities Fund												
Capacity Fees	Ś	393,000	ċ	900,000	Ċ	322,000	Ċ	_	\$	1,419,000	ċ	3,034,000
User Fees	Ş	9,833,922	Ş	6,183,942	ې	8,477,326	ڔ	- 8,224,945	Ş	6,738,810	Ş	39,458,945
Total Other Sources	Ċ	10,226,922	Ś	7,083,942	Ś	8,799,326	Ś	8,224,945 8,224,945	Ś	8,157,810	Ś	42,492,945
Total Other Jources	<u> </u>	10,220,322	Ą	7,003,342	ų	0,133,320	٠	0,444,343	Ą	0,137,010	Ą	74,7343

CAPITAL IMPROVEMENTS PROGRAM OPERATING LIFE CYCLE COSTS

COUNTY	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>Full Year</u> <u>Online</u>
Ektron Enterprise Licensing Agreement	\$ -	\$ -	\$ 11,250	\$ 11,588	\$ 11,935	\$ -
Records Management & Mobile Field Reporting System	-	-	-	70.000	72,100	-
CAD Replacement	20,000	20,300	20,706	21,327	21,967	-
Total County Improvements Fund	\$ 20,000	\$ 20,300	\$ 31,956	\$ 102,915	\$ 106,002	\$ -
EDUCATION						
Total Education	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total County Improvements Fund & Education	\$ 20,000	\$ 20,300	\$ 31,956	\$ 102,915	\$ 106,002	\$ -
AIRPORT						
Total Airport	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PUBLIC UTILITIES						
Water Source and Distribution Projects:						
Elmont Water Storage Tank and Booster Stn	\$ -	\$ -	\$ -	\$ -	\$ 31,000	\$ -
Dianne Ridge Water Treatment	-	-	3,000	3,090	3,183	-
Powder Activated Carbon Feed System	-	-	-	-	56,000	-
Wastewater Collection and Treatment Projects:						
Totopotomoy WWTP Nutrient Removal Impr.	-	12,000	12,240	12,607	12,985	-
Shelton Pointe Pump Station Upgrade		-	-	-		12,000
Total Public Utilities	\$ -	\$ 12,000	\$ 15,240	\$ 15,697	\$ 103,168	\$ -
GRAND TOTAL	\$ 20,000	\$ 32,300	\$ 47,196	\$ 118,612	\$ 209,170	\$ -

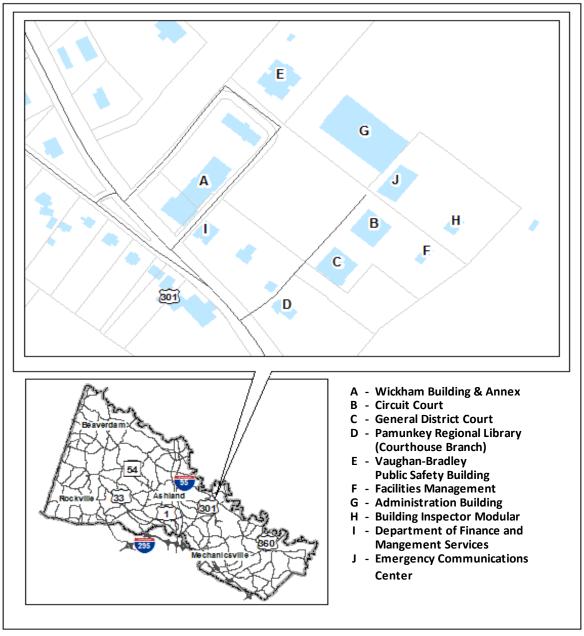
NOTES:

- (1) Operating impacts noted above are those that would increase the County's current level of funding, therefore, there is no operating impact on replacement equipment.
- (2) Through FY16, all Education projects are either replacement or facility improvements. In the last 2 years of the CIP, in addition to these similar types of projects, there are large scale facility renovations. Operationally, however, the facilities will not require additional staffing and will improve the efficiency of mechanical systems, resulting in no additional operating costs.
- (3) Any debt funding associated with CIP projects has been accounted for in the County's Five-Year Financial Plan and is not represented on this table of operating impacts.
- (4) The final column, "Full Year Online" is intended to show the operational costs of new facilities in Year 5 of the CIP. It could take up to three years before a new building would be constructed and incur a full year's worth of operational costs within a given fiscal year. Therefore, this table does not assume construction time, but rather the total cost in whatever year the full cost of operations becomes effective.

General Government Administration

The Hanover County Government Complex is comprised of ten buildings: Wickham Building & Annex, Circuit Court, General District Court, Pamunkey Regional Library (Courthouse Branch), Vaughan-Bradley Public Safety Building, Facilities Management, Administration Building, Building Inspector/Modular Building, Department of Finance and Management Services, and the Emergency Communications Center.

The Administration Building houses the Board of Supervisors meeting room and the offices for the following general government administrative functions: County Administrator, County Attorney, Public Utilities, Building Inspector, Public Works and the Planning Department. The Wickham Building houses the Commissioner of the Revenue, Treasurer, Information Technology, Registrar, and the Department of Human Resources. Offices for certain other functions are also housed in the Wickham and Wickham Annex Buildings.



Functional Area: General Government

Department: Human Resources

Project: Time and Attendance System

Location: All County

Description: The County currently does not have an automated system to track labor costs and collect time

entries required for the payroll process. The tracking of employee time and leave information is currently in a manual, paper and labor intensive manner using Excel spreadsheets and manual workflows. In addition, there is no way to track time against work assignments and projects. This is a significant business need for departments to calculate the true costs of projects and/or services. The public safety departments have unique, complex scheduling requirements and pay rules that require significant manual effort. A time and attendance solution would greatly improve efficiencies, reduce risk and provide accurate cost data. Phase one (1) will implement the Countywide time and attendance system. Phase two will institute public safety scheduling.

Useful Life: 10 years

Timetable: Phase 1 in FY15 and Phase 2 in FY16

Operating Impact: Operating impact(s) are unknown at this time, but the maintenance is expected to be handled

within the Human Resources Department budget.

	FY14	1	FY15	FY	16	FY17		FY18	Totals
Funding Sources									
General Fund	\$	- 9	\$ 208,000	\$ 2	40,000 \$		- \$	-	\$ 448,000
Total Sources	\$	- (\$ 208,000	\$ 2	40,000 \$		- \$	-	\$ 448,000
Funding Uses									
Equipment	\$	- 5	\$ 208,000	\$ 2	40,000 \$		- \$	-	\$ 448,000
Total Uses	\$	- ;	\$ 208,000	\$ 2	40,000 \$		- \$	-	\$ 448,000

Functional Area: General Government

Department: Finance & Management Services

Project: Legacy System Upgrades

Location: All County

Description: The County's major business applications have all been evaluated to determine the necessary

investment strategy. Approximately 36 (55%) of the major business applications should be retired. Over 28 (80%) of the systems slated for retirement run on the IBM AS/400 iSeries platform. Vendors that provide our current suite of major business application systems are no longer making significant improvements to their AS/400 products. The vendors are strongly encouraging moving to the windows based version of their products to get the functionality we require for conducting County business. Of the 36 applications scheduled for retirement, 28 are more than nine years old. Ten of the major business applications scheduled for retirement are more than 15 years old. Retiring aged business systems is an important goal for the County in order to provide adequate functionality and meet customer business requirements in the future. The CIP project for business application replacements establishes a capital project to begin replacing applications in a systematic manner. The IT Project Governance process has identified the highest priority and value potential for starting the application replacements. A number of systems have been preliminarily identified for replacement consideration in FY15. Those systems

may include:

1) Payroll System Upgrade

2) Compensation System Upgrade

Useful Life: 10 years

Timetable: FY15 purchase and installation

Operating Impact: Operating impact(s) are unknown at this time, but the maintenance is expected to be handled

within the Departmental budget.

	FY1	1	FY15	F۱	/16	FY17	FY18	Totals
Funding Sources								
General Fund	\$	- \$	335,000	\$	- \$	- \$	- \$	335,000
Total Sources	\$	- \$	335,000	\$	- \$	- \$	- \$	335,000
Funding Uses								
Equipment	\$	- \$	335,000	\$	- \$	- \$	- \$	335,000
Total Uses	\$	- \$	335,000	\$	- \$	- \$	- \$	335,000

Functional Area: General Government

Department: Assessor

Project: Computer-Assisted Mass Appraisal (CAMA) Replacement System

Location: 7515 County Complex Road, Hanover, VA 23069

Description: Replace the existing CAMA system with a new system that meets the Assessor's business needs.

This would include enhancements to the commercial modeling capability and the interface with

the revenue and billing modules of the financial system.

Useful Life: 10-12 years

Timetable: FY15

Operating Impact: Operating impact(s) are unknown at this time, but the maintenance is expected to be handled

within the Departmental budget.

	FY1	4	FY15	FY16	FY1	.7 F	Y18	Totals
Funding Sources								
General Fund	\$	- \$	350,000	\$	- \$	- \$	- \$	350,000
Total Sources	\$	- \$	350,000	\$	- \$	- \$	- \$	350,000
Funding Uses								
Equipment	\$	- \$	350,000	\$	- \$	- \$	- \$	350,000
Total Uses	\$	- \$	350,000	\$	- \$	- \$	- \$	350,000

Functional Area: General Government

Department: Information Technology

Project: Technology Infrastructure

Location: Various county office buildings as required

Description: Technology Infrastructure includes the County's Network, Server, and iSeries, including the

County's Security & Network Protection methods. Some of these costs are not separated by categories as vendors bid these as bundled prices to include the equipment, software licenses and their maintenance/warranty coverage. These upgrades are required as shifts in technology occur, to provide current support and warranty coverage, and provide system enhancements along with implementation of new technologies. These funds also ensure the Continuity of Operations for all technology services within the County. This CIP includes all hardware to operate the County's

infrastructure in all County locations except for Public Utilities and Pamunkey Regional Jail.

Useful Life: The County has adopted a replacement strategy based upon the useful life or when the

equipment vendor has classified the product as EOL (End Of Life) and is no longer supporting the

product.

Timetable: Major purchases include an FY14 iSeries System Upgrade and enhancements to the County's

major systems. FY14-17 also includes funds to allow the County to replace equipment that had

been delayed from prior fiscal years.

	FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources						
General Fund	\$ 620,000	\$ 720,000	\$ 790,000	\$ 790,000	\$ 850,000	\$ 3,770,000
Total Sources	\$ 620,000	\$ 720,000	\$ 790,000	\$ 790,000	\$ 850,000	\$ 3,770,000
Funding Uses						
Equipment	\$ 620,000	\$ 720,000	\$ 790,000	\$ 790,000	\$ 850,000	\$ 3,770,000
Total Uses	\$ 620,000	\$ 720,000	\$ 790,000	\$ 790,000	\$ 850,000	\$ 3,770,000

Functional Area: General Government

Department: Information Technology

Project: Enterprise Licenses

Location: Wickham Building

Description: The County utilizes numerous enterprise software agreements to keep and maintain systems with

up-to-date software that provides users and customers with extended functionality, corrections for known issues and key security upgrades. The Microsoft Enterprise Agreement is one example that provides software licensing and product access for all County computers. Servers, desktops, laptops and other device operating systems are funded and maintained through the Enterprise Agreement. Employees are licensed to use the latest version of Microsoft productivity tools, including Office, SharePoint, Exchange and many other products. Administrative costs are greatly reduced through the use of the Enterprise License Agreements. Licenses do not have to be purchased with new computers and the management of licenses are simplified and very efficient. Users have access to vendor issued patches and updates for their systems without the need to repurchase software or pay vendors on a time and materials basis to correct problems. FY15

represents and actual cost increase, while FY16-18 show anticipated cost increases.

Useful Life: Varies based upon the product, however all product upgrades are included with the license

 ${\it agreement.}$

Timetable: Perform updates as deployed by the vendor, the enterprise agreement is done in 3 year terms.

	 FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources						
General Fund	\$ 220,000	\$ 235,000	\$ 240,000	\$ 240,000	\$ 240,000	\$ 1,175,000
Total Sources	\$ 220,000	\$ 235,000	\$ 240,000	\$ 240,000	\$ 240,000	\$ 1,175,000
Funding Uses						
Facility Improvements	\$ 220,000	\$ 235,000	\$ 240,000	\$ 240,000	\$ 240,000	\$ 1,175,000
Total Uses	\$ 220,000	\$ 235,000	\$ 240,000	\$ 240,000	\$ 240,000	\$ 1,175,000

Functional Area: General Government

Department: Information Technology

Project: Storage Area Networks (SAN)

Location: Wickham Building

Description: Technology infrastructure enhancements for the County's Storage Area Network. The current

SAN was originally purchased in FY11 using Energy Efficiency and Conservation Block Grant (EECBG) funds. The SAN provides the County with the ability to provide storage with greater capabilities and reliability. The SAN allows multiple system access, which helps the County ensure that we are utilizing all storage more effectively and efficiently than traditional server storage. The SAN also provides greater advance fault detection, allowing staff the ability to identify potential issues and correct them before the problems cause catastrophic system failures and

service outages.

Useful Life: Varies - typically 10-15 years

Timetable: FY14 starts the renewal for warranty and maintenance. FY15 and FY16 address future growth and

upgrades. FY17 includes the addition of a new unit to provide for anticipated storage growth as

we migrate our major systems away from the IBM iSeries systems.

	 FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources						
General Fund	\$ 80,000	\$ 80,000	\$ 80,000	\$ 450,000	\$ 80,000	\$ 770,000
Total Sources	\$ 80,000	\$ 80,000	\$ 80,000	\$ 450,000	\$ 80,000	\$ 770,000
Funding Uses						
Equipment	\$ 80,000	\$ 80,000	\$ 80,000	\$ 450,000	\$ 80,000	\$ 770,000
Total Uses	\$ 80,000	\$ 80,000	\$ 80,000	\$ 450,000	\$ 80,000	\$ 770,000

Functional Area: General Government

Department: Information Technology

Project: Computer Replacement Program

Location: Wickham Building

Description: In FY10, declines in revenue as a result of the recession caused the County to migrate from a 4

year computer replacement plan that kept systems current and operating at a reasonable level of performance to a program whereby equipment is replaced only when it is no longer functional. The County currently has 358 computers that are more than four years old and 215 computers that are four years old. The large number of PCs of this age results in inefficency and impacts workforce productivity. This funding level continues the recent practice and does not increase the replacement schedule or number of devices. These dollars have been maximized by the use of

new lower cost device offerings recently put in place.

Useful Life: 4 years

Timetable: On-going

	 FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources General Fund	\$ 75,000	\$ 50,000	\$ 125,000	\$ 150,000	\$ 200,000	\$ 600,000
Total Sources	\$ 75,000	\$ 50,000	\$ 125,000	\$ 150,000	\$ 200,000	\$ 600,000
Funding Uses						
Equipment	\$ 75,000	\$ 50,000	\$ 125,000	\$ 150,000	\$ 200,000	\$ 600,000
Total Uses	\$ 75,000	\$ 50,000	\$ 125,000	\$ 150,000	\$ 200,000	\$ 600,000

Functional Area: General Government

Department: Information Technology

Project: County Fiber Expansion

Location: County-wide, between primary sites

Description: The goal of this project is to provide enhancements to the existing fiber optic infrastructure that is

being used by both the Schools and the County. This project will allow the County to complete the existing Fiber network to provide network failover during outages. The first step will be to utilize consultants to help plan and enhance our network by providing a path that runs from the County complex to the Taylor complex. The second phase will be to run fiber from the Taylor complex to the School Board office. This project will also be used to expand the use of the data path provided

by the County Radio system into more County facilities.

Useful Life: 15+ years

Timetable: A good portion of FY17 will be spent in the design phase. The end of FY17 and into FY18 will

comprise the construction phase.

		FY14		FY15			FY16			FY17		FY18		Totals
Funding Sources														
General Fund	\$		- \$		-	\$		-	\$	225,000	\$	225,000	\$	450,000
Total Sources	\$		- \$		-	\$		-	\$	225,000	\$	225,000	\$	450,000
Funding Uses														
Facility	ċ		- \$			\$			\$	225.000	\$	225,000	Ś	450,000
Improvements	۶ 		- ,			ڔ			٦	223,000	ڔ	223,000	ڔ	450,000
Total Uses	\$		- \$		-	\$		-	\$	225,000	\$	225,000	\$	450,000

Functional Area: General Government

Department: Information Technology

Project: Data Center Upgrades

Location: Various Primary and Backup Data Centers in the County

Description: This project will provide required maintenance and enhancements of the County Data Centers to

ensure the continuity of the county technology operations by ensuring that existing cooling and UPS (Uninterruptable Power Supply) systems continue to operate properly with regular maintenance and upgrades. Future expenditures are for annual and quarterly maintenance of existing cooling and UPS equipment, UPS battery replacements, major component upgrades and replacements, area modifications for growth of services, and improvements to center interconnects to provide highly available systems and services. Without this routine maintenance and upgrades of critical systems, the equipment may fail without warning or not operate as required. Loss of stabilized power or cooling could lead to catastrophic failure of major business

systems affecting all county citizens.

Useful Life: 5 years for UPS batteries and major components of the cooling system. Major components of the

UPS (such as capacitors and filtering ckts) have a 3-5 year useful life. Maintenance is an annual

expense.

Timetable: Enhancements and maintenance will take place in FY17 and FY18 in a phased approach designed

to minimize time that system components may be offline.

		FY14		FY15			FY16			FY17		FY18		Totals
Funding Sources General Fund	¢		- \$		_	¢		_	¢	150,000	¢	75,000	¢	225,000
Total Sources	\$		- \$		-	\$		-	\$	150,000	\$	75,000	\$	225,000
Funding Uses	-													
Facility Improvements	\$		- \$		-	\$		-	\$	150,000	\$	75,000	\$	225,000
Total Uses	\$		- \$		-	\$		-	\$	150,000	\$	75,000	\$	225,000

Functional Area: General Government

Department: Information Technology

Project: Tax Parcel Data Enhancement

Location: Information Technology (GIS Division)

Description: The basis of the County's real estate tax record system is the tax parcel. Local government tax

parcel data is the legal repository of land ownership and property value. The original GIS parcel data layer was established in the mid 1990's by digitally converting hard copy manually created maps that were not based on deeds or survey plats. Since the County's assessment system (CAMA) is predominantly based on physical attributes of a parcel and characteristics of the land that comprises the parcel, it is imperative that parcels be as accurate as possible. The intent of this GIS Parcel Data Enhancement Proposal is to meet the following goals: improve the spatial integrity of the existing GIS parcel data layer; establish a master parcel database repository to integrate to CAMA system (discover missing tax revenue, reduce field work, equitable taxation); establish rules and procedures to ensure the accuracy of future GIS parcel edits; increase overall tax parcel record accuracy in other business systems; increase parcel data management efficiency;

and, establish an environment that will integrate to future County business systems.

Useful Life: The intent is to use consulting services in conjunction with GIS staff to perform this work. The

results of this project will establish the necessary policies and procedures to be used for future

deed/plat related updates.

Timetable: The project will begin in July 2014 (FY15).

	FY14		FY15	FY16	FY17	FY18	Totals
Funding Sources General Fund	\$	- \$	104,000 \$	- \$	- \$	- \$	104,000
Total Sources	\$	- \$	104,000 \$	- \$	- \$	- \$	104,000
Funding Uses Professional Services	\$	- \$	104,000 \$	- \$	- \$	- \$	104,000
Total Uses	\$	- \$	104,000 \$	- \$	- \$	- \$	104,000

Functional Area: General Government

Department: Information Technology

Project: Ektron Enterprise Licensing Agreement

Location: N/A

Description: The County is currently purchasing single user licenses for Ektron and is limited to one (1) web

address (URL) for the use of the software. With the completed web site redesign, by FY15, the County should be in a position to take greater advantage of expanding access to Ektron for additional content providers and begin using the product for additional URLs. Continuing to purchase the single user licenses will not be cost-effective and the enterprise license is a much

preferred way to complete this expansion.

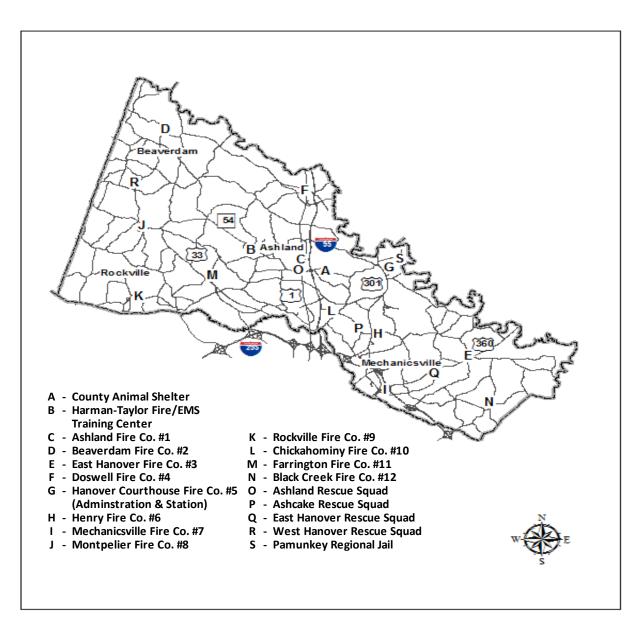
Useful Life: 10+ years

Timetable: FY15 purchase and implement the enterprise software.

Operating Impact: Annual software maintenance fees estimated to be 15% of license costs.

	FY14		FY15	FY16		FY17	FY18	Totals
Funding Sources								
General Fund	\$	- \$	75,000	\$	- \$	- \$	- \$	75,000
Total Sources	\$	- \$	75,000	\$	- \$	- \$	- \$	75,000
Funding Uses								
Facility Improvements	\$	- \$	75,000	\$	- \$	- \$	- \$	75,000
Total Uses	\$	- \$	75,000	\$	- \$	- \$	- \$	75,000

The existing Public Safety Functions include the Sheriff, Emergency Communications, Community Corrections, Juvenile Court Services, and Building Inspector's Office located at the Hanover County Government Complex. The County also provides a facility for the Animal Shelter at the Taylor House Complex (A). The Harman-Taylor Fire/EMS Training Center is located in Ashland, VA (B) and Fire/EMS administration is a part of Hanover Courthouse Station #5 (G). The twelve fire stations are: Ashland Co. #1 (C), Beaverdam Co. #2 (D), Black Creek Co. #12 (N), Chickahominy Co. #10 (L), Doswell Co.#4 (F), East Hanover Co. #3 (E), Farrington Co. #11 (M), Hanover Courthouse Co. #5 (G), Henry Co. #6 (H), Mechanicsville Co. #7 (I), Montpelier Co. #8 (J), and Rockville Co. #9 (K). The four rescue squads are: Ashland (O), Ashcake (P), East Hanover (Q), and West Hanover (R). The County participates in the Pamunkey Regional Jail (S).



Functional Area: Public Safety

Department: Sheriff

Project: Records Management and Mobile Field Reporting System

Location: Vaughn-Bradley Building

Description: The Sheriff's Office is currently using a Records Management System (RMS) that does not meet

current law enforcement standards and requirements. The New World System was originally purchased in 1996. The current version runs on the AS/400 platform which is gradually being dropped from vendor support. Critical business needs for Mobile Data Computing like Mobile Field Reporting along with the ability for officers to search the RMS while on patrol do not exist in the current system. Integration with mapping and crime intelligence systems are also substandard. The ability to show linkages between victims, crimes, property, vehicles and suspects is not easily available in the current system. A modern Records Management System provides a wealth of data and functionality that will aid law enforcement and support the

criminial justice system.

Useful Life: 10 years

Timetable: On-going

Operating Impact: There will be ongoing maintenance of approximately \$70,000.

	 FY14	FY15		FY16	FY17		FY18		Totals
Funding Sources									
General Fund	\$ -	\$	-	\$ 685,000	\$	- \$		-	\$ 685,000
Total Sources	\$ -	\$	-	\$ 685,000	\$	- \$		-	\$ 685,000
Funding Uses									
Equipment	\$ -	\$	-	\$ 685,000	\$	- \$		-	\$ 685,000
Total Uses	\$ -	\$	-	\$ 685,000	\$	- \$		-	\$ 685,000

Functional Area: Public Safety

Department: Sheriff's Office

Project: Vaughan-Bradley Building HVAC

Location: Vaughn-Bradley Law Enforcement Office

Description: The manufacturer no longer makes an interface for the current HVAC system in the Vaughn-

Bradley building. Toggle switches are being placed onto each control unit as an interim measure.

With funding for this project, this unit will be replaced.

Useful Life: 15 years

Timetable: FY16 purchase and installation

	FY14	FY15		FY16	FY17		FY18		Totals
Funding Sources General Fund	\$ -	\$	_	\$ 225,000	\$	_	\$	_	\$ 225,000
Total Sources	\$ -	\$	-	\$ 225,000	\$	-	\$	-	\$ 225,000
Funding Uses Facility Improvements	\$ -	\$	-	\$ 225,000	\$	-	\$	-	\$ 225,000
Total Uses	\$ -	\$	-	\$ 225,000	\$	-	\$	-	\$ 225,000

Functional Area: Public Safety

Department: Sheriff's Office

Project: Vaughan-Bradley Building Chiller Replacement

Location: Vaughn-Bradley Law Enforcement Office

Description: The Vaughan-Bradley building chiller has surpassed its life expectancy. Additionally, the controls

are out of date and will cost more to fix than buy new.

Useful Life: 15-20 years

Timetable: FY17 purchase and installation

	FY14	FY15		FY16		FY17	FY18		Totals
Funding Sources General Fund	\$ -	\$	_	\$	_	\$ 175,000	\$	_	\$ 175,000
Total Sources	\$ -	\$	-	\$	-	\$ 175,000	\$	-	\$ 175,000
Funding Uses Facility									
Improvements	\$ -	\$	-	\$	-	\$ 175,000	\$	-	\$ 175,000
Total Uses	\$ -	\$	-	\$	-	\$ 175,000	\$	-	\$ 175,000

Functional Area: Public Safety

Department: Sheriff's Office

Project: Firing Range Lead Removal

Location: Hanover County Sheriff's Office Range

Description: Lead removal is an EPA Best Practice for outdoor firing ranges and should be done every 10-12

years. The last removal was completed in 2007. This process will prevent the Hanover Sheriff's

Office Range from being a hazardous environment.

Useful Life: N/A

Timetable: The lead removal process will be started and completed in FY18.

	 FY14		FY15		FY16		FY17		FY18	Totals
Funding Sources										
General Fund	\$	- \$		-	\$	-	\$	-	\$ 100,000	\$ 100,000
Total Sources	\$	· \$		-	\$	-	\$	-	\$ 100,000	\$ 100,000
Funding Uses Professional Services	\$	- \$		-	\$	-	\$	-	\$ 100,000	\$ 100,000
Total Uses	\$	- \$		-	\$	-	\$	-	\$ 100,000	\$ 100,000

Functional Area: Public Safety

Department: Sheriff's Office

Project: Elevator Cylinder Replacement

Location: Vaughn-Bradley Law Enforcement Office

Description: The current elevator shaft/cylinder in the Vaughn-Bradley building is 17 years old and has a 20

year anticipated useful life. Scheduled replacement of this unit is preferred over an emergency repair or replacement. This project would plan for the replacement at the end of its useful life.

Useful Life: 20 years

Timetable: FY17 purchase and installation

	 FY14		FY15		FY16		FY17	FY18		Totals
Funding Sources General Fund	\$	- \$		_	\$	_	\$ 75,000	\$	-	\$ 75,000
Total Sources	\$	- \$		-	\$	-	\$ 75,000	\$	-	\$ 75,000
Funding Uses										
Professional Services	\$	- \$		-	\$	-	\$ 75,000	\$	-	\$ 75,000
Total Uses	\$	- \$		-	\$	-	\$ 75,000	\$	-	\$ 75,000

Functional Area: Public Safety

Department: Emergency Communications

Project: Radio Replacement - Portable & Mobile

Location: 7501 Library Drive, Hanover, VA 23069

Description: Portable and mobile radio units purchased with the recent radio system upgrade project will be

reaching the end of their anticipated useful life within this Five-Year Plan. The funding of this project anticipates setting aside money beginning in FY16 for use in a phased-in replacement plan.

Useful Life: Current radio subscribers are anticipated to have a useful life of 7-10 years. This project

represents the initial lifecycle replacement plan request for a phased multi year relacement

program.

Timetable: Preliminary procurement work will begin in FY15, with purchase of phase one equipment in FY16.

	 FY14		FY15		FY16	FY17	FY18	Totals
Funding Sources General Fund	\$ -	· \$		-	\$ 1,250,000	\$ 1,250,000	\$ 500,000	\$ 3,000,000
Total Sources	\$ -	\$		-	\$ 1,250,000	\$ 1,250,000	\$ 500,000	\$ 3,000,000
Funding Uses								
Equipment	\$ -	\$		-	\$ 1,250,000	\$ 1,250,000	\$ 500,000	\$ 3,000,000
Total Uses	\$	\$		-	\$ 1,250,000	\$ 1,250,000	\$ 500,000	\$ 3,000,000

Functional Area: Public Safety

Department: Emergency Communications

Project: Computer Aided Dispatch (CAD) System Replacement

Location: 7501 Library Drive, Hanover, VA 23069

Description: The Information Technology Department has been working with Public Safety departments

regarding the upgrade of critical Public Safety computer systems and applications. The Sheriff's Office, Regional Jail and Emergency Communications Departments all share an integrated solution that utilizes critical public safety data to improve response to the citizens and ensure essential information is available to our first responders. The Computer Aided Dispatch (CAD) system is the hub of the integrated system and has been identified as the first priority for

replacement/upgrade.

Useful Life: The current Computer Aided Dispatch (CAD) system has been in service for 17 years. The

anticipated useful life of a new CAD system is 15 years.

Timetable: Procurement will begin in FY14 with an anticipated 18 month implementation process.

Operating Impact:

	FY14	FY15	FY16	FY17	FY18	Total Impact
ĺ	20,000	20,000	20,000	20,000	20,000	100,000

The new CAD system is expected to have maintenance costs that are higher than our current application consistent with the increased value of the new software solution. The costs reflected are estimates of the net impact to the General Fund.

	 FY14	FY15		FY16		FY17		FY18		Totals
Funding Sources General Fund	\$ 956,000	\$	_	\$	_	\$	-	\$	_	\$ 956,000
Total Sources	\$ 956,000	\$	-	\$	-	\$	-	\$	-	\$ 956,000
Funding Uses Equipment	\$ 956,000	\$	_	\$	_	\$	_	\$	_	\$ 956,000
Total Uses	\$ 956,000	\$	-	\$	-	\$	-	\$	-	\$ 956,000

Functional Area: Public Safety

Department: Fire/EMS

Project: Fire Engine and Heavy Squad Replacement

Location: Fire Stations in Hanover County

Description: The County operates a fleet of 21 engines, five (5) tankers, three (3) ladder trucks and

miscellaneous air utility vehicles, brush trucks, heavy duty squad trucks, first responder all-purpose vehicles and a mobile command unit. The current replacement plan envisions a 10 year useful life for engines, a 15 year useful life for ladder trucks, and a 15 year useful life for tankers. To maintain this plan it is necessary to replace two engines per year within the five-year plan. The engines in this rotation are the first line engines for fire and medical response from the County fire stations. They have a capacity of 750 gallons of water, 2,000 gallon per minute pump, 2,000 feet of assorted hose, breathing apparatus and the capability of transporting six (6) fire fighters to emergency scenes. This plan will not expand the current fleet of fire engines beyond the 21

currently in operation.

Useful Life: The current replacement plan envisions a 10 year useful life for engines, a 15 year useful life for

ladder trucks, and a 15 year useful life for tankers.

Timetable: Two (2) fire apparatus would be replaced each year with a projected delivery 300 days from the

purchase date. Under current financial restraints, we are pursuing the concept of a refurbishment program for support vehicles, i.e. tankers, heavy rescues, ladder trucks, as a stop gap measure for

a limited time period.

Operating Impact: Repair expenses increase and reliability decreases with the age of equipment. The replacement

plan has been created to mitigate the cost and hazard of malfunctioning equipment in order to

better ensure the prompt response to calls for service.

FY14 FY15 **FY16 FY17 FY18 Totals Funding Sources** General Fund 250,000 500,000 500,000 500,000 750,000 2,500,000 **Total Sources** 250,000 500,000 \$ 500,000 500,000 750,000 2,500,000 **Funding Uses** Vehicles 250,000 500,000 500,000 \$ 500,000 750,000 2,500,000 **Total Uses** 250,000 500,000 500,000 500,000 750,000 2,500,000

Functional Area: Public Safety

Department: Fire/EMS

Project: Ambulance Replacement

Location: Ambulance in Hanover County

Description: Hanover County currently operates 21 ambulances from 13 stations. The fleet will remain at 21

ambulances. Ambulances are chosen for replacement based on estimated maintenance costs, mileage, age, and the number of previous chassis applied to the ambulance. All ambulances will be outfitted to advanced life support standards. Expected useful life is 15 years with proper

maintenance.

Useful Life: 15 years

Timetable: At this funding level, the County will purchase two (2) ambulances per year.

Operating Impact: Repair expenses increase and reliability decreased with the age of equipment. The replacement

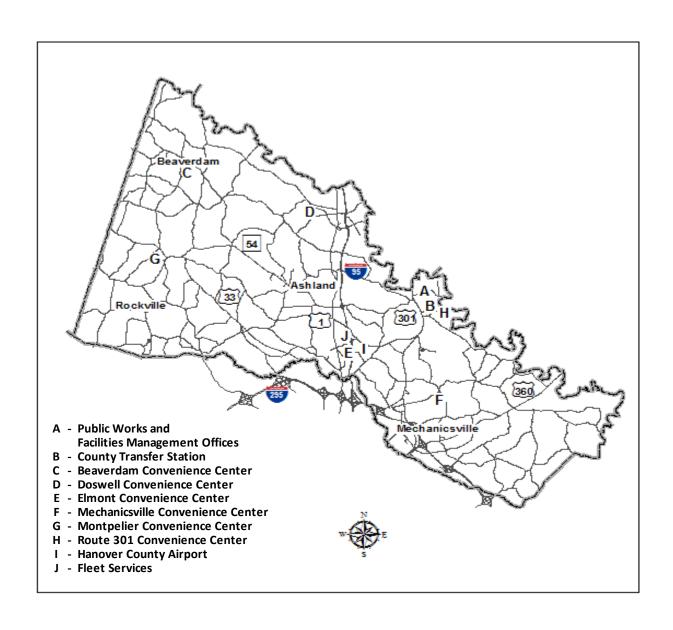
plan has been created to mitigate the cost and hazard of malfunctioning equipment in order to

better ensure the prompt response to calls for service.

	FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources						
General Fund	\$ 376,000	\$ 386,000	\$ 396,000	\$ 414,120	\$ 434,826	\$ 2,006,946
Total Sources	\$ 376,000	\$ 386,000	\$ 396,000	\$ 414,120	\$ 434,826	\$ 2,006,946
Funding Uses						
Vehicles	\$ 376,000	\$ 386,000	\$ 396,000	\$ 414,120	\$ 434,826	\$ 2,006,946
Total Uses	\$ 376,000	\$ 386,000	\$ 396,000	\$ 414,120	\$ 434,826	\$ 2,006,946

Public Works

The Public Works function facilities include the Public Works and Facilities Management offices in the Administration Building at the Hanover County Government Complex (A). In addition, this function also includes the Hanover County Airport (I), and the County Transfer Station (B) and its six Solid Waste convenience centers: Beaverdam (C), Doswell (D), Elmont (E), Mechanicsville (F), Montpelier (G), and Route 301 (H). The County Garage is located on Lewistown Road (J).



Public Works

Functional Area: Public Works

Department: Public Works

Project: Reserve for Future Roadway Improvements

Location: Not Determined

Description: The intent of this project is to improve traffic operations and highway capacity or construct new

roadways on an as-needed basis to be determined by the Board of Supervisors. The funds will also be used to match state funds for specific road projects and to help offset unforeseen

construction cost increases on current and future road projects.

Useful Life: N/A

Timetable: Continuous improvements

500,000 \$	1,750,000
1,000,000	5,000,000
1,500,000 \$	6,750,000
825 000 \$	3,712,500
450,000	2,025,000
225,000 1 500 000 \$	1,012,500 6,750,000
	1,000,000 \$ 1,500,000 \$ 825,000 \$ 450,000

Functional Area: Public Works

Department: Public Works

Project: Watershed Improvement Program

Location: Hanover County

Description: A draft special condition in the State's Municipal Separate Storm Sewer System (MS4) draft

general permit would require the County to develop and implement a Chesapeake Bay TMDL (Total Maximum Daily Load) action plan to reduce pollutants discharged from our public storm sewer system. The Chesapeake Bay TMDL is a "pollution diet" established by the U.S. Environmental Protection Agency (EPA) and implemented through Virginia's Watershed Implementation Plan (WIP) to improve water quality in the Chesapeake Bay watershed. Localities in the Bay watershed with MS4 permits like Hanover will be mandated to reduce pollutants from previously developed lands as a condition of their permit cycle. To accomplish these required pollutant reductions, projects to install stormwater treatment facilities or best management practices (BMPs) on existing developed lands will be implemented over a projected 15-year period. Capital implementation costs are projected to be \$71 million over the 15-year period. The State's WIP requires localities to address 5% of the required reductions in the first 5-year cycle, 35% in the second 5-year cycle, and the remaining 60% reductions in the third 5-year cycle. The estimates are very preliminary and will be refined by future analysis of permit conditions.

Useful Life: N/A

Timetable: FY14-FY28

Operating Impact: To be determined

	FY14		FY15	FY16	FY17	FY18	Totals
Funding Sources							
User Fees	\$	-	\$ 1,394,000	\$ 1,086,000	\$ 1,108,000	\$ 1,130,000	\$ 4,718,000
Total Sources	\$	-	\$ 1,394,000	\$ 1,086,000	\$ 1,108,000	\$ 1,130,000	\$ 4,718,000
Funding Uses							
Facility							
Improvements	\$	-	\$ 1,064,000	\$ 1,086,000	\$ 1,108,000	\$ 1,130,000	\$ 4,388,000
Professional Services		-	330,000	-	-	-	330,000
Total Uses	\$	-	\$ 1,394,000	\$ 1,086,000	\$ 1,108,000	\$ 1,130,000	\$ 4,718,000

Functional Area: Public Works

Department: Public Works

Project: Regional Stormwater Implementation

Location: Suburban Service Area

Description: The County's stormwater program provides for the collection of a one-time pro-rata share fee

from development based on the amount of impervious surface. Fees collected are used to construct regional stormwater management ponds to meet water quality requirements instead of requiring on-site Best Management Practices. Participation in the County's program is voluntary. The fee models that support the program are based upon stormwater program management, capital and oversight costs incurred in designing, acquiring and building drainage basins. The revenue is remitted to the Capital Improvements Fund, which then transfers a portion to the General Fund as a reimbursement for two part-time positions plus overhead. Due to changes to the State's stormwater management Regulations, the County's regional stormwater program may

no longer be able to provide credits for development starting in FY15.

Useful Life: N/A

Timetable: FY14-FY15

	 FY14	FY15	FY16		FY17		FY18		Totals
Funding Sources									
Fees	\$ 164,700	\$ 264,700	\$	-	\$	-	\$	-	\$ 429,400
Total Sources	\$ 164,700	\$ 264,700	\$	-	\$	-	\$	-	\$ 429,400
Funding Uses Professional Services	\$ 164,700	\$ 164,700	\$	-	\$	-	\$	-	\$ 329,400
Facility Improvements	-	100,000		-		-		-	100,000
Total Uses	\$ 164,700	\$ 264,700	\$	-	\$	-	\$	-	\$ 429,400

Functional Area: Public Works

Department: Solid Waste Services

Project: Solid Waste Equipment Replacement

Location: County Convenience Centers and Transfer Station

Description: The project will purchase replacement equipment to handle solid waste at the County

Convenience Centers, Route 301 Transfer Station and Waste-to-Compost (WTC). This project is necessary to maintain a viable fleet of solid waste handling equipment. Aging equipment will be taken out of service and replaced with modern, reliable equipment. Acquisition of new equipment will provide for more efficient operations with less maintenance and repair downtime.

Useful Life: The estimated useful life varies for this equipment; Wheel Loader - 15 years, Roll-off Truck- 10

years, Road Tractor - 20 years, Stationary Compactor - 5 to 15 years (varies with usage).

Timetable: FY14-Wheeled Tire Loader; FY15-Roll-off Truck; FY16-Roll-off Truck; FY17-Farm Tractor and

Equipment; FY18-Wheeled Loader

	FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources						
General Fund	\$ 200,000	\$ 100,000	\$ 100,000	\$ 190,000	\$ 100,000	\$ 690,000
Total Sources	\$ 200,000	\$ 100,000	\$ 100,000	\$ 190,000	\$ 100,000	\$ 690,000
Funding Uses						
Equipment	\$ 200,000	\$ 100,000	\$ 100,000	\$ 190,000	\$ 100,000	\$ 690,000
Total Uses	\$ 200,000	\$ 100,000	\$ 100,000	\$ 190,000	\$ 100,000	\$ 690,000

Functional Area: Public Works

Department: General Services

Project: General Vehicle Replacement Schedule

Location: Fleet

Description: As the County's fleet ages, vehicle replacement is required. The yearly budgeted amounts would

go directly to replacing County vehicles.

Useful Life: 7-10 years

Timetable: FY14 - FY18

	 FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources						
General Fund	\$ 125,000	\$ 140,000	\$ 200,000	\$ 300,000	\$ 300,000	\$ 1,065,000
Total Sources	\$ 125,000	\$ 140,000	\$ 200,000	\$ 300,000	\$ 300,000	\$ 1,065,000
Funding Uses						
Vehicles	\$ 125,000	\$ 140,000	\$ 200,000	\$ 300,000	\$ 300,000	\$ 1,065,000
Total Uses	\$ 125,000	\$ 140,000	\$ 200,000	\$ 300,000	\$ 300,000	\$ 1,065,000

Functional Area: Public Works

Department: General Services

Project: Facility Maintenance

Location: Fleet facility

Description: Concrete floors in all bay areas are in need of top-coat application to protect and extend working

life of garage floor. Dropped tools, spills, and the weight of vehicles all combine to destroy, split

and crack the concrete surface.

Useful Life: 10 - 15 years

Timetable: FY17

	FY14		FY15		FY16		FY17	FY18		Totals
Funding Sources										_
General Fund	\$	- \$		-	\$	-	\$ 300,000	\$	-	\$ 300,000
Total Sources	\$	- \$		-	\$	-	\$ 300,000	\$	-	\$ 300,000
Funding Uses Facility Improvements	\$	- \$		-	\$	_	\$ 300,000	\$	_	\$ 300,000
Total Uses	\$	- \$		-	\$	-	\$ 300,000	\$	-	\$ 300,000

Functional Area: Public Works

Department: General Services

Project: Telecommunications Switch Upgrades

Location: Multiple

Description: This project would result in upgrading five (5) remaining telephone switches, including the

Government Complex, to maintain compliance with the supported versions of the County's

current Mitel software and hardware.

Useful Life: 10 - 15 years

Timetable: FY15 purchase and installation

	 FY14		FY15	FY16		FY17		FY18		Totals
Funding Sources										
General Fund	\$	-	\$ 150,000	\$	-	\$	-	\$	-	\$ 150,000
Total Sources	\$	-	\$ 150,000	\$	-	\$	-	\$	-	\$ 150,000
Funding Uses										
Facility Improvements	\$	-	\$ 150,000	\$	-	\$	-	\$	-	\$ 150,000
Total Uses	\$	-	\$ 150,000	\$	-	\$	-	\$	-	\$ 150,000

Functional Area: Public Works

Department: General Services

Project: HVAC Fan Units - Annex

Location: Wickham Annex Building

Description: Present HVAC units in the Wickham Annex are failing and cannot be repaired due to their age.

This project would replace all existing fan coil HVAC units and piping with more efficient 2-pipe

units.

Useful Life: 25 - 30 years

Timetable: FY18 purchase and installation

	 FY14		FY15		FY16		FY17		FY18	Totals
Funding Sources General Fund	\$	- \$		_	\$	-	\$	_	\$ 145,000	\$ 145,000
Total Sources	\$	- \$		-	\$	-	\$	-	\$ 145,000	\$ 145,000
Funding Uses Facility Improvements	\$	- 5		-	\$	-	\$	-	\$ 145,000	\$ 145,000
Total Uses	\$	- \$,	-	\$	-	\$	-	\$ 145,000	\$ 145,000

Functional Area: Public Works

Department: General Services

Project: HVAC Air Handler Replacement

Location: Wickham Building

Description: The HVAC Supply and Return building air handlers are continuing to age and deteriorate. This

project would replace these units.

Useful Life: 25 - 40 years

Timetable: FY18 purchase and installation

		FY14		FY15		FY16		FY17		FY18	Totals
Funding Sources											
General Fund	\$		- \$		-	\$	-	\$	-	\$ 97,000	\$ 97,000
Total Sources	\$		- \$		-	\$	-	\$	-	\$ 97,000	\$ 97,000
	-										
Funding Uses											
Facility	\$		- \$		-	\$	-	\$	-	\$ 97,000	\$ 97,000
Improvements											
Total Uses	\$		- \$		-	\$	-	\$	-	\$ 97,000	\$ 97,000

Functional Area: Public Works

Department: General Services

Project: Elevator Cylinder Replacement

Location: Wickham Building

Description: Hydraulic cylinder elevators will ultimately fail due to corrosion brought about by water and

electrolysis. The anticipated useful life of a cylinder can be anywhere from 20 to 40 years

depending on the environment. This unit slated for replacement is past the 35 year mark.

Useful Life: 20 - 40 years

Timetable: FY16 purchase and installation

		FY14		FY15		FY16	FY17		FY18		Totals
Funding Sources											
General Fund	\$		- \$		-	\$ 51,000	\$	-	\$	-	\$ 51,000
Total Sources	\$		- \$		-	\$ 51,000	\$	-	\$	-	\$ 51,000
	-										
Funding Uses											
Facility Improvements	\$		- \$		-	\$ 51,000	\$	-	\$	-	\$ 51,000
Total Uses	\$		- \$		-	\$ 51,000	\$	-	\$	-	\$ 51,000

Functional Area: Public Works

Department: General Services

Project: Roof Replacement

Location: Ashland Library

Description: The Ashland Library is in need of a new roof and flashing due to age, condition, and warranty.

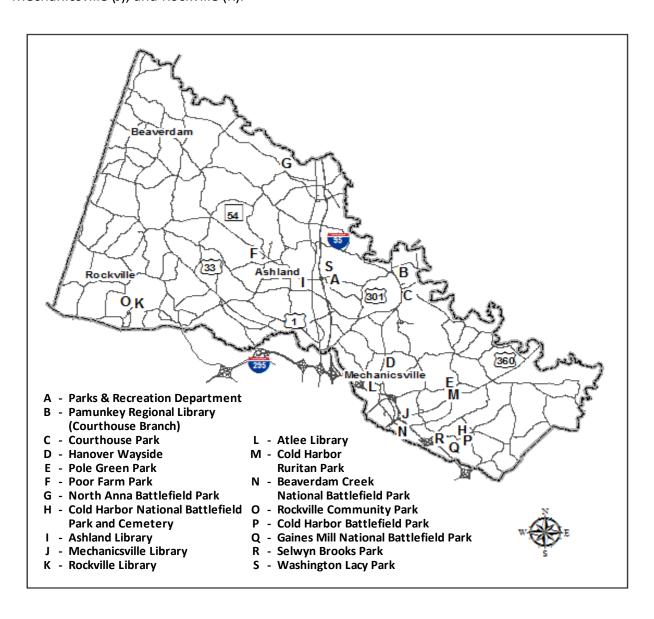
Useful Life: 20 years

Timetable: FY18

	FY14		FY15		FY16		FY17		FY18	Totals
Funding Sources General Fund	\$	- \$		_	\$	-	\$	_	\$ 51,000	\$ 51,000
Total Sources	\$	- \$		-	\$	-	\$	-	\$ 51,000	\$ 51,000
Funding Uses Facility Improvements	\$	- \$		-	\$	_	\$	-	\$ 51,000	\$ 51,000
Total Uses	\$	- \$		-	\$	-	\$	-	\$ 51,000	\$ 51,000

Parks, Recreation and Cultural

Parks, Recreation and Cultural Facilities include the services provided by the Parks and Recreation Department located at the Taylor Complex (A) and the Pamunkey Regional Library located at the Hanover County Government Complex (B). Existing Parks include Courthouse Park (C), Hanover Wayside (D), Pole Green (E), Poor Farm (F), North Anna Battlefield Park (G), Cold Harbor National Battlefield Park & Cemetery (H), Cold Harbor Ruritan Park (M), Beaverdam Creek National Battlefield Park (N), Rockville Community Park (O), Cold Harbor Battlefield Park (P), Gaines Mill National Battlefield Park (Q), Selwyn Brooks Park (R), and Washington Lacy Park (S). Libraries include Ashland (I), Atlee (L), Hanover Courthouse (B), Mechanicsville (J), and Rockville (K).



Parks, Recreation and Cultural

Functional Area: Parks, Recreation and Cultural

Department: Parks and Recreation

Project: Skate Park Repairs & Renovations

Location: 8996 Pole Green Park Ln., Mechanicsville, VA 23116

Description: The Skate Park is currently in need of repairs and replacement of the existing equipment which

has deteriorated as a result of exposure to the elements.

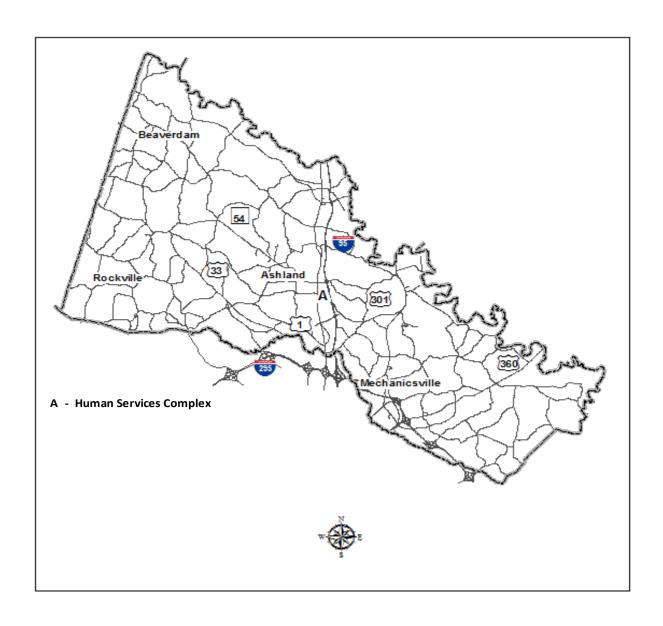
Useful Life: 20 + years

Timetable: FY14

	 FY14	FY15		FY16		FY17		FY18		Totals
Funding Sources										
General Fund	\$ 50,000	\$	-	\$	-	\$	-	\$	-	\$ 50,000
Total Sources	\$ 50,000	\$	-	\$	-	\$	-	\$	-	\$ 50,000
Funding Uses										
Equipment	\$ 50,000	\$	-	\$	-	\$	-	\$	-	\$ 50,000
Total Uses	\$ 50,000	\$	-	\$ •	-	\$ •	-	\$ •	-	\$ 50,000

Human Services

The Human Services functions include Social Services, Community Services Board, and Community Resources. All Human Services related departments are located at the Hanover County Human Services Complex (A) located at 12310 Washington Hwy. in the Town of Ashland.



Human Services

Functional Area: Human Services

Department: Community Services Board (CSB)

Project: RAFT House Purchase

Location: Undetermined

Description: The RAFT House CIP is to provide a facility that fully meets the program needs of the CSB

psychosocial rehabilitation program, while also eliminating the last remaining CSB leased facility. The current facility does not allow for needed expansion and configuration for optimum programming. Transition to a County owned facility will also provide a more cost effective

alternative to long-term leasing.

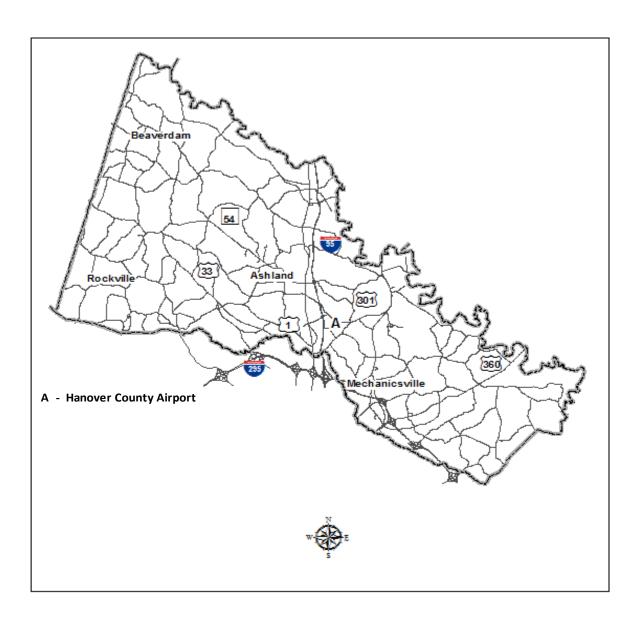
Useful Life: 20 + years

Timetable: Purchase of an existing property or construction in FY18

		FY14		FY15		FY16		FY17		FY18	Totals
Funding Sources											
General Fund	\$		- \$		-	\$	-	\$	-	\$ 500,000	\$ 500,000
Total Sources	\$		- \$		-	\$	-	\$	-	\$ 500,000	\$ 500,000
	<u></u>										
Funding Uses											
Equipment	\$		- \$		-	\$	-	\$	-	\$ 500,000	\$ 500,000
Total Uses	\$		- \$		-	\$	-	\$	-	\$ 500,000	\$ 500,000

Hanover County Airport

The Hanover County Airport facilities include the County Airport (A) located at 11152 Airpark Rd.



Airport Fund

Functional Area: Public Works

Department: Airport

Project: East Side Taxiway and Apron

Location: Hanover County Airport, 11152 Airpark Road, Ashland, VA 23005

Description: This expansion allows use of space for needed aircraft overflow parking. No more land is

currently available for parking on the west side and all aircraft tie down spots are occupied.

Useful Life: N/A

Timetable: FY15 Design, FY16-17 Construction

		FY14			FY15		FY16		FY17		FY18			Totals
Funding Sources														
State VDOA Grant	\$		-	\$	15,000	\$	122,713	\$	122,713	\$		-	\$	260,426
FAA Grant			-		475,000		3,885,901		3,885,901			-		8,246,802
Total Sources	\$		-	\$	490,000	\$	4,008,614	\$	4,008,614	\$		-	\$	8,507,228
Funding Uses														
Professional	,			,	400.000	,		,		,			,	400.000
Services	\$		-	\$	490,000	\$	-	\$	-	\$		-	\$	490,000
Construction			-		-		4,008,614		4,008,614			-		8,017,228
Total Uses	\$		-	\$	490,000	\$	4,008,614	\$	4,008,614	\$		-	\$	8,507,228

Airport Fund

Functional Area: Public Works

Department: Airport

Project: Airport Land Acquisition

Location: Hanover County Airport, 11152 Airpark Road, Ashland, VA 23005

Description: The 2000 Airport Master Plan indicates the need to purchase 58 acres of land and aviation

easements to the North, South and East of the runway to meet FAA Airport Safety Criteria. Purchase of this land or easement is required to remove airspace obstructions and complete East side expansion. The County will give priority for acquisition of required land when it is on the

market.

Useful Life: N/A

Timetable: FY17 purchase of land or easements

		FY14		F	Y15		FY16		FY17	FY18		Totals
Funding Sources												_
State VDOA Grant	\$		-	\$		-	\$	-	\$ 39,243	\$	-	\$ 39,243
FAA Grant			-			-		-	1,242,699		-	1,242,699
Total Sources	\$		-	\$		-	\$	-	\$ 1,281,942	\$	-	\$ 1,281,942
	-											
Funding Uses												
Land	\$		-	\$		-	\$	-	\$ 1,281,942	\$	-	\$ 1,281,942
Total Uses	\$		-	\$		-	\$	-	\$ 1,281,942	\$	-	\$ 1,281,942

Airport Fund

Functional Area: Public Works

Department: Airport

Project: Airport Improvements

Location: Hanover County Airport, 11152 Airpark Road, Ashland, VA 23005

Description: Funding initiative to be used toward the construction of projects identified in the Airport Master

Plan.

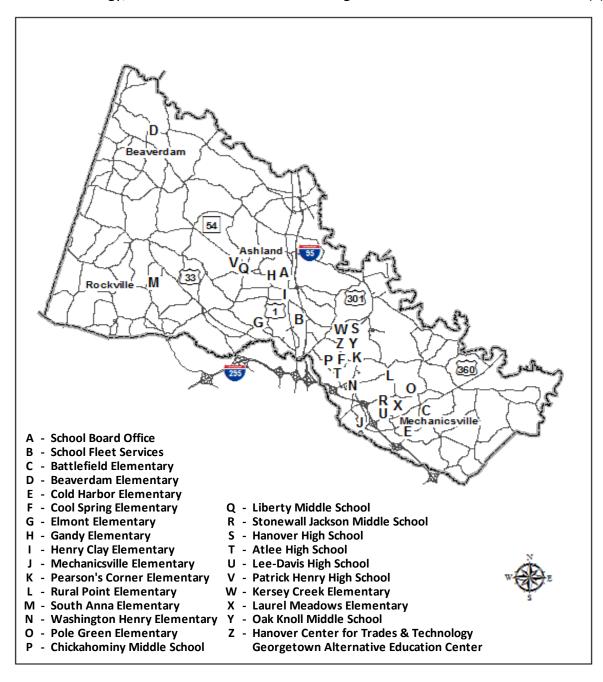
Useful Life: N/A

Timetable: FY14 obstruction removal. Projects will be initiated as sufficient funding is accumulated and/or

grant funds become available.

	FY14	FY15		FY16		FY17		FY18		Totals
Funding Sources										
General Fund	\$ 3,499	\$	-	\$	-	\$	-	\$	-	\$ 3,499
State VDOA Grant	13,996		-		-		-		-	13,996
FAA Grant	 157,455		-		-		-		-	157,455
Total Sources	\$ 174,950	\$	-	\$	-	\$	-	\$	-	\$ 174,950
Funding Uses										
Construction	\$ 174,950	\$	-	\$	-	\$	-	\$	-	\$ 174,950
Total Uses	\$ 174,950	\$	-	\$	-	\$	-	\$	-	\$ 174,950

The Education facilities for the Hanover County Public Schools include the School Board (A) where all administrative functions are performed and the School Bus Garage (B). There are twenty-four schools in the County including fifteen elementary schools: Battlefield (C), Beaverdam (D), Cold Harbor (E), Cool Spring (F), Elmont (G), Gandy (H), Henry Clay (I), Kersey Creek (W), Mechanicsville (J), Pearson's Corner (K), Rural Point (L), South Anna (M), Washington-Henry (N), Pole Green (O) and Laurel Meadows (X); four middle schools: Chickahominy (P), Liberty (Q), Stonewall Jackson (R), and Oak Knoll (Y); four high schools: Atlee (T), Lee-Davis (U), Patrick Henry (V), and Hanover (S); one trade school: Hanover Center for Trades & Technology; and one alternative school: Georgetown Alternative Education Center (Z).



Functional Area: Education

Department: Hanover County Public Schools

Project: Facility Renovations: Battlefield Park

Location: Battlefield Park Elementary School

Description: As a result of the 2005 Facilities Renovation Study, a wholistic renovation of Battlefield Park

Elementary School is planned. The renovation will include exterior windows, carpet/tile replacement, new marker boards, lighting, HVAC, and energy management among other items.

Useful Life: 20 years

Timetable: 2020 - Project complete

Operating Impact: The renovation replaces older equipment and provides more economical systems resulting in a

better educational environment.

	 FY14		FY15		FY16		FY17		FY18	Totals
Funding Sources										
Debt - VPSA	\$	- \$		-	\$	-	\$	-	\$ 15,600,000	\$ 15,600,000
Total Sources	\$	- \$		-	\$	-	\$	-	\$ 15,600,000	\$ 15,600,000
Funding Uses										
Construction	\$	- \$		-	\$	-	\$	-	\$ 15,600,000	\$ 15,600,000
Total Uses	\$	- \$		-	\$	-	\$	-	\$ 15,600,000	\$ 15,600,000

Functional Area: Education

Department: Hanover County Public Schools

Project: Facility Renovations: Washington-Henry Elementary School

Location: Washington-Henry Elementary School

Description: As a result of the 2005 Facilities Renovation Study, a wholistic renovation of Washington Henry

Elementary School is planned. The renovation will include exterior windows, carpet/tile replacement, new marker boards, lighting, HVAC, and energy management among other items.

Useful Life: 20 years

Timetable: 2019 - Project complete

Operating Impact: The renovation replaces older equipment and provides more economical systems resulting in a

better educational environment. The school will also be equipped with better technology for

teaching.

	 FY14		FY1	.5		FY16		FY17	FY18		Totals
Funding Sources											
Debt - VPSA	\$	-	\$		-	\$	-	\$ 15,000,000	\$	-	\$ 15,000,000
Total Sources	\$	-	\$		-	\$	-	\$ 15,000,000	\$	-	\$ 15,000,000
Funding Uses											
Construction	\$	-	\$		-	\$	-	\$ 15,000,000	\$	-	\$ 15,000,000
Total Uses	\$	-	\$		-	\$	-	\$ 15,000,000	\$	-	\$ 15,000,000

Functional Area: Education

Department: Hanover County Public Schools

Project: Facility Renovations: Henry Clay Elementary School

Location: Henry Clay Elementary School

Description: As a result of the 2005 Facilities Renovation Study, a wholistic renovation of Henry Clay Elementary

School is planned. The renovation will include exterior windows, carpet/tile replacement, new

marker boards, lighting, HVAC, and energy management among other items.

Useful Life: 20 years

Timetable: 2020 - Project complete

Operating Impact: The renovation replaces older equipment and provides more economical systems resulting in a

better educational environment.

		FY14		FY15			FY16		FY17			FY18		Totals
Funding Sources Debt - VPSA	Ś		- Ś		_	Ś		_	\$	_	Ś	14,600,000	Ś	14,600,000
Total Sources	\$		- \$		-	\$		-	\$	-	\$	14,600,000	\$	14,600,000
Funding Uses Professional Services Construction	\$		- \$ -		-	\$		-	\$	-	\$	1,000,000	\$	1,000,000
Total Uses	\$		- \$		-	\$		-	\$	-	\$	14,600,000	\$	14,600,000

Functional Area: Education

Department: Hanover County Public Schools

Project: Facility Renovations: Beaverdam Elementary School

Location: Beaverdam Elementary School

Description: As a result of the 2005 Facilities Renovation Study, a wholistic renovation of Beaverdam

Elementary School is planned. The renovation will include exterior windows, carpet/tile replacement, new marker boards, lighting, HVAC, and energy management among other items.

Useful Life: 20 years

Timetable: 2019 - Project complete

Operating Impact: The renovation replaces older equipment and provides more economical systems resulting in a

better educational environment.

	 FY14		FY15		FY16		FY17	FY18		Totals
Funding Sources										
Debt - VPSA	\$	- \$		-	\$	-	\$ 11,400,000	\$	-	\$ 11,400,000
Total Sources	\$	- \$		-	\$	-	\$ 11,400,000	\$	-	\$ 11,400,000
Funding Uses										_
Construction	\$	- \$		-	\$	-	\$ 11,400,000	\$	-	\$ 11,400,000
Total Uses	\$	- \$		-	\$	-	\$ 11,400,000	\$	-	\$ 11,400,000

Functional Area: Education

Department: Hanover County Public Schools

Project: School Buses

Location: Transportation

Description: Annually, school buses need to be purchased on a replacement schedule to minimize the number

of buses over 12 years old in the fleet. Further, additional buses need to be purchased for growth

in enrollment, special needs and out of service units.

Useful Life: 10-15 years

Timetable: Annual purchases

Operating Impact: The annual replacement of school buses removes the oldest, least efficient buses from the fleet

and increases the operational efficiency and reliablity of the fleet.

	FY14		FY15	FY16	FY17	FY18	Totals
Funding Sources							
General Fund	\$	-	\$ 2,040,000	\$ 2,065,000	\$ 2,780,000	\$ 3,113,000	\$ 9,998,000
Total Sources	\$	-	\$ 2,040,000	\$ 2,065,000	\$ 2,780,000	\$ 3,113,000	\$ 9,998,000
Funding Uses							
Vehicles	\$	-	\$ 2,040,000	\$ 2,065,000	\$ 2,780,000	\$ 3,113,000	\$ 9,998,000
Total Uses	\$	-	\$ 2,040,000	\$ 2,065,000	\$ 2,780,000	\$ 3,113,000	\$ 9,998,000

Functional Area: Education

Department: Hanover County Public Schools

Project: Computer Replacement

Location: All Schools

Description: This request provides for a phased replacement of computer units at various facilities. Provisions

are also made for Specialty Center equipment replacement cycle.

Useful Life: 5 years

Timetable: Annual purchase of computers and related hardware

	FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources						
General Fund	\$ 1,820,000	\$ 1,550,000	\$ 1,637,000	\$ 1,670,000	\$ 1,520,000	\$ 8,197,000
Total Sources	\$ 1,820,000	\$ 1,550,000	\$ 1,637,000	\$ 1,670,000	\$ 1,520,000	\$ 8,197,000
Funding Uses						
Equipment	\$ 1,820,000	\$ 1,550,000	\$ 1,637,000	\$ 1,670,000	\$ 1,520,000	\$ 8,197,000
Total Uses	\$ 1,820,000	\$ 1,550,000	\$ 1,637,000	\$ 1,670,000	\$ 1,520,000	\$ 8,197,000

Functional Area: Education

Department: Hanover County Public Schools

Project: Facilities Improvement

Location: School facilities constructed prior to 2000

Description: During the 1998-99 school year, all facilities constructed prior to Pole Green Elementary School

were surveyed to determine infrastructure system and/or improvements needs. The work will be

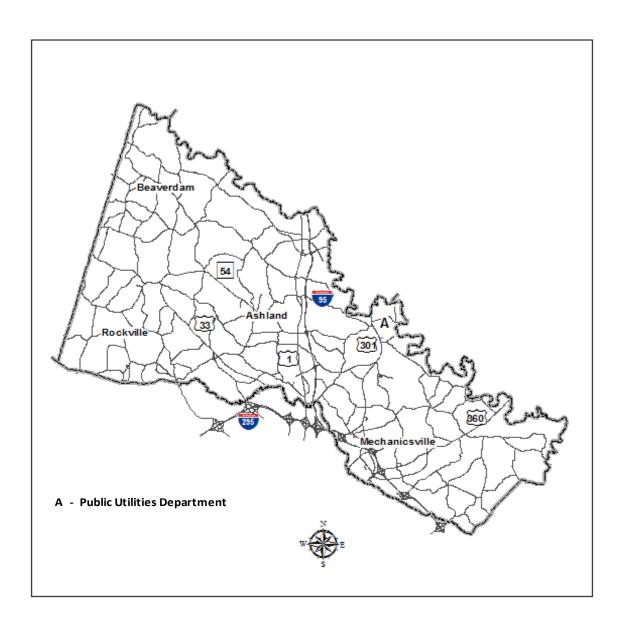
prioritized and improvements will occur annually.

Useful Life: 20 years

Timetable: On-going

	FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources						_
Debt - VPSA	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000
General Fund	-	1,000,000	1,000,000	1,000,000	1,000,000	4,000,000
Total Sources	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 5,000,000
Funding Uses						
Construction	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 5,000,000
Total Uses	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 5,000,000

The Public Utilities Department is located at the Hanover County Complex on Rt. 301. Capital improvements (e.g., water/sewer lines) are shown with a map, if applicable. Refer to the description of the Public Utilities Department in the operating budget document for a comprehensive overview of the utility system.



Functional Area: Public Utilities

Project: Hanover-Richmond Joint Capital Contract Payment

Description: This project provides for improvements to the City of Richmond water system to support

Hanover County's water demands. Included in this project is \$25,187,945 over five years for

jointly funded capital improvements in the City.

Useful Life: N/A

Timetable: FY14 - FY18

	 FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources						
User Fees	\$ 2,636,922	\$ 4,308,942	\$ 7,042,326	\$ 6,295,945	\$ 4,903,810	\$ 25,187,945
Total Sources	\$ 2,636,922	\$ 4,308,942	\$ 7,042,326	\$ 6,295,945	\$ 4,903,810	\$ 25,187,945
Funding Uses						
Joint Capital	\$ 2,636,922	\$ 4,308,942	\$ 7,042,326	\$ 6,295,945	\$ 4,903,810	\$ 25,187,945

Functional Area: Public Utilities

Project: Elmont Water Storage Tank and Booster Station

Location: Intersection of Cedar Lane and Karen Drive (FMP W93 & W94)

Description: This project provides for the FY15 design and FY17 construction of a 1 MG water storage tank

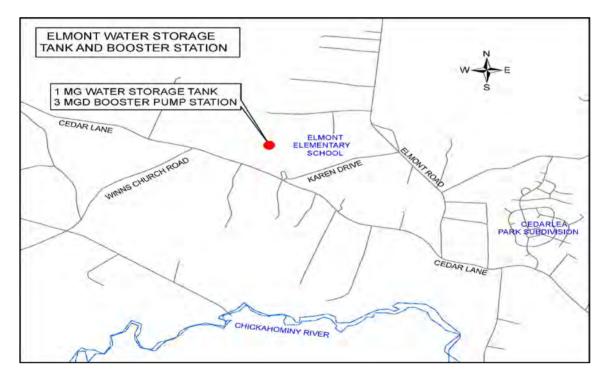
and a 3 MGD booster pump station to be located near the intersection of Cedar Lane and Karen Drive. This project provides water storage to the southwestern portions of the Suburban Service Area (SSA) and is needed to provide adequate system pressures and fire flows in the far

western portions of the growth area.

Useful Life: 35-75 years

Timetable: Design (FY15); Construction (FY17)

Operating Impact: \$31,000/year



		FY14			FY15		FY16			FY17		FY18			Totals
Funding Sources															_
Long Term Debt	\$		-	\$	697,000	\$		-	\$	2,955,000	\$		-	\$	3,652,000
Total Sources	\$		-	\$	697,000	\$		-	\$	2,955,000	\$		-	\$	3,652,000
Professional	۲.			۲	CO7 000	۲			\$		Ś			۲.	607.000
Services	Ş		-	Ş	697,000	Þ		-	Ş	-	Ş		-	Ş	697,000
Construction			-		-			-		2,955,000			-		2,955,000
Total Uses	\$		-	\$	697,000	\$		-	\$	2,955,000	\$		-	\$	3,652,000

Functional Area: Public Utilities

Project: New Ashcake Road Waterline Improvements

Location: Along New Ashcake Road from Linderwood Drive to Sliding Hill Road (FMP W14)

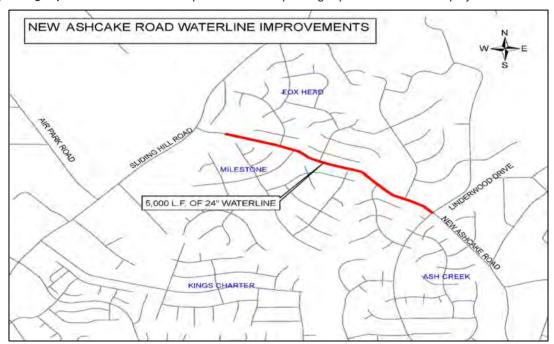
Description: This project provides for the FY16 design and easement acquisition and FY18 construction of

approximately 5,000' of 24" waterline along New Ashcake Road from Linderwood Drive (end of the existing 20") to the vicinity of the intersection of New Ashcake and Sliding Hill Roads, where it will tie to the existing 24" waterline. This waterline improvement provides increased transmission capacity to the planned Garnett/Ashcake Road Water Storage Tank and Pump Station while maintaining pressure for domestic service and fire suppression use along New

Ashcake Road.

Useful Life: 50 years

Timetable: Design and Easement Acquisition (FY16); Construction (FY18)



	FY14		FY15		FY16	FY17		FY18	Totals
Funding Sources									
Capacity Fees	\$	-	\$	-	\$ 322,000	\$	-	\$ 1,334,000	\$ 1,656,000
Total Sources	\$	-	\$	-	\$ 322,000	\$	-	\$ 1,334,000	\$ 1,656,000
Funding Uses Professional Services Land	\$		\$	-	\$ 200,000	\$		\$ -	\$ 200,000 122,000
		-		-	122,000		-	-	,
Construction		-		-	-		-	1,334,000	1,334,000
Total Uses	\$	-	\$	-	\$ 322,000	\$	-	\$ 1,334,000	\$ 1,656,000

Functional Area: Public Utilities

Project: Cedar Lane Waterline Improvements

Location: Along Cedar Lane from Cedarlea Parkway to Route 1 (FMP W25)

Description: This project provides for the FY16 design and easement acquisition and FY18 construction of

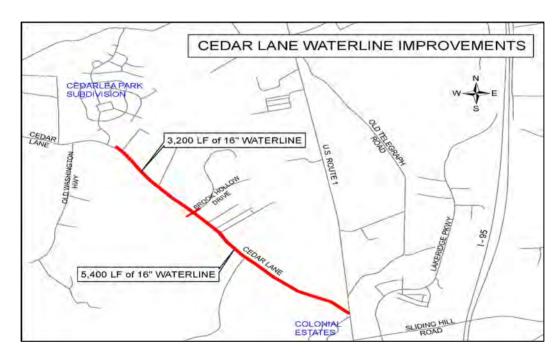
approximately 3,200' of 16" waterline from Cedarlea along Cedar Lane to Brookhollow Drive and the FY18 design and easement acquisition and FY20 construction of approximately 5,400' of 16" waterline from Brookhollow Drive to Route 1. This waterline project provides improved water distribution service for both domestic service and fire suppression use along Cedar Lane

and will support the Cedar Lane-Winns Church Road-Route 33 waterline project.

Useful Life: 50 years

Timetable: Design and Easement Acquisition (FY16); Design, Easement Acquisition and Construction

(FY18)



		FY14		FY15			FY16		FY17			FY18		Totals
Funding Sources Long Term Debt Total Sources	\$ \$		<u>-</u>	\$ \$	-	\$ \$	208,000 208,000	\$ \$		-	\$ \$	1,185,000 1,185,000	\$ \$	1,393,000 1,393,000
rotal sources	<u> </u>					<u> </u>	200,000	<u> </u>			<u> </u>	1,103,000	<u> </u>	1,333,000
Funding Uses Professional Services	\$		- :	\$	-	\$	125,440	\$		-	\$	215,000	\$	340,440
Land			-		-		82,560			-		144,000		226,560
Construction			-		-		-			-		826,000		826,000
Total Uses	\$		- :	\$	-	\$	208,000	\$		-	\$	1,185,000	\$	1,393,000

Functional Area: Public Utilities

Project: Chamberlayne Road Waterline Improvements - Phase II

Location: Along Chamberlayne Road from Shady Grove Road to Crown Colony Parkway (FMP W34)

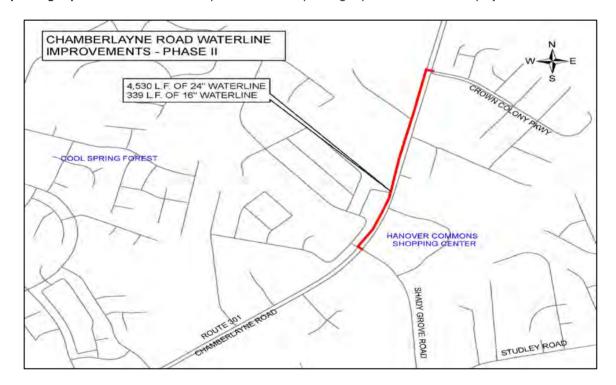
Description: This project provides for the FY10 design and easement acquisition and FY15 construction of

4,530' of 24" and 339' of 16" waterline from Shady Grove Road to Crown Colony Parkway along Chamberlayne Road. This waterline improvement provides increased transmission capacity to the planned Garnett/Ashcake Road Water Storage Tank and Pump Station while maintaining pressure for domestic service and fire suppression use in the Chamberlayne Road and New

Ashcake Road areas.

Useful Life: 50 years

Timetable: Construction (FY15)



	FY14		FY15	FY16		FY17		FY18		Totals
Funding Sources										
Capacity Fees	\$	-	\$ 900,000	\$	-	\$	-	\$	-	\$ 900,000
Total Sources	\$	-	\$ 900,000	\$	-	\$	-	\$	-	\$ 900,000
Funding Uses Professional Services	\$	-	\$ 17,000	\$	-	\$	-	\$	-	\$ 17,000
Construction		-	883,000		-		-		-	883,000
Total Uses	\$	-	\$ 900,000	\$	-	\$	-	\$	-	\$ 900,000

Functional Area: Public Utilities

Project: Water Tank Rehabilitation

Location: Suburban Service Area and Rural Systems

Description: This project provides for the continuing funding to rehabilitate existing water storage tanks

throughout the Suburban Service Area and Rural Systems. Specific and planned repairs are scheduled for the following tanks: Oakhill Hydro and Storage Tank FY15; Jackson Avenue

Elevated Storage Tank FY16; Pamunkey Regional Jail Tank FY18.

Useful Life: 50-75 years

Timetable: Design and Construction (FY15-FY18)

	FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources						
User Fees	\$ -	\$ 110,000	\$ 350,000	\$ 75,000	\$ 295,000	\$ 830,000
Total Sources	\$ -	\$ 110,000	\$ 350,000	\$ 75,000	\$ 295,000	\$ 830,000
Funding Uses						
Professional Services	\$ -	\$ 15,000	\$ 40,000	\$ -	\$ 20,000	\$ 75,000
Construction	-	95,000	310,000	75,000	275,000	755,000
Total Uses	\$ -	\$ 110,000	\$ 350,000	\$ 75,000	\$ 295,000	\$ 830,000

Functional Area: Public Utilities

Project: Lockwood Pump Station Improvements

Location: Lockwood Pump Station on Richfood Road

Description: This project provides for the FY14 design and construction of the following:

• upgrade of the Programmable Logic Controller (PLC)

- hard wired controls to each Adjustable Frequency Drive (AFD)

- control of the discharge valves

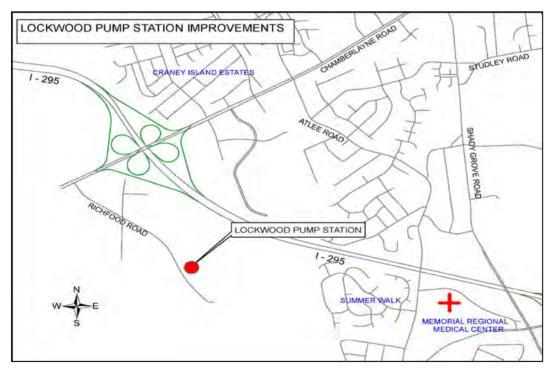
• communication change to Modbus protocol

• replacement of all existing AFDs as they have reached the end of their useful lives

• replacement of 16" meter

Useful Life: 20 years

Timetable: Design and Construction (FY14)



	 FY14	FY15		FY16		FY17		FY18		Totals
Funding Sources										_
User Fees	\$ 539,000	\$	-	\$	-	\$	-	\$	-	\$ 539,000
Total Sources	\$ 539,000	\$	-	\$	-	\$	-	\$	-	\$ 539,000
Funding Uses										
Professional Services	\$ 65,700	\$	-	\$	-	\$	-	\$	-	\$ 65,700
Construction	473,300		-		-		-		-	473,300
Total Uses	\$ 539,000	\$	-	\$	-	\$	-	\$	-	\$ 539,000

Functional Area: Public Utilities

Project: Walnut Grove Road Waterline Improvements

Location: Along Walnut Grove Road from Route 360 to Old Calvary Drive (FMP W16)

Description: This project provides for the FY12 design and easement acquisition and FY14 construction of

1,700' of 12" waterline from its terminus on Walnut Grove Road near Battlefield Park Elementary School, across Route 360 to Old Calvary Drive. This project is required to improve fire flow in the Battlefield Park Elementary School and Battlefield Green Subdivision areas.

Useful Life: 50 years

Timetable: Construction (FY14)



	 FY14	FY15		FY16		FY17		FY18		Totals
Funding Sources										_
Capacity Fees	\$ 393,000	\$	-	\$	-	\$	-	\$	-	\$ 393,000
Total Sources	\$ 393,000	\$	-	\$	-	\$	-	\$	-	\$ 393,000
Funding Uses										
Professional Services	\$ 8,000	\$	-	\$	-	\$	-	\$	-	\$ 8,000
Construction	385,000		-		-		-		-	385,000
Total Uses	\$ 393,000	\$	-	\$	-	\$	-	\$	-	\$ 393,000

Functional Area: Public Utilities

Project: Powder Activated Carbon Feed System

Location: Doswell Water Treatment Plant

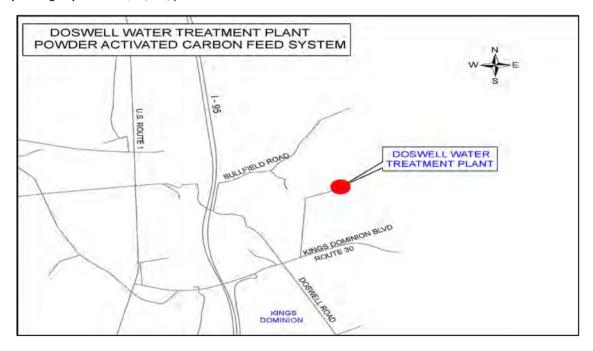
Description: The Stage II Disinfectant By Product Rule is more stringent than the previous rule. This project

provides for powdered activated carbon addition if warranted.

Useful Life: 30 years

Timetable: Design and Construction (FY17)

Operating Impact: \$56,000/year



	FY14	FY15		FY16		FY17	FY18		Totals
Funding Sources User Fees	\$ -	\$	_	\$	_	\$ 354,000	\$	_	\$ 354,000
Total Sources	\$ -	\$	-	\$	-	\$ 354,000	\$	-	\$ 354,000
Funding Uses Professional Services Construction	\$ -	\$	-	\$	-	\$ 54,000 300,000	\$	-	\$ 54,000 300,000
Total Uses	\$ 	\$	-	\$	-	\$ 354,000	\$	-	\$ 354,000

Functional Area: Public Utilities

Project: Waterline Replacement

Location: Suburban Service Area and Rural Systems

Description: This project provides for the replacement of aged and undersized waterlines in various streets

within the Suburban Service Area and Rural Systems.

Useful Life: 50 years

Timetable: Design and Construction (FY15-FY18)

	FY14		FY15	FY16	FY17	FY18	Totals
Funding Sources							
User Fees	\$	- \$	75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 300,000
Total Sources	\$	- \$	75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 300,000
Funding Uses							
Professional Services	\$	- \$	7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 30,000
Construction		-	67,500	67,500	67,500	67,500	270,000
Total Uses	\$	- \$	75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 300,000

Functional Area: Public Utilities

Project: Water Treatment Plant Rehabilitation

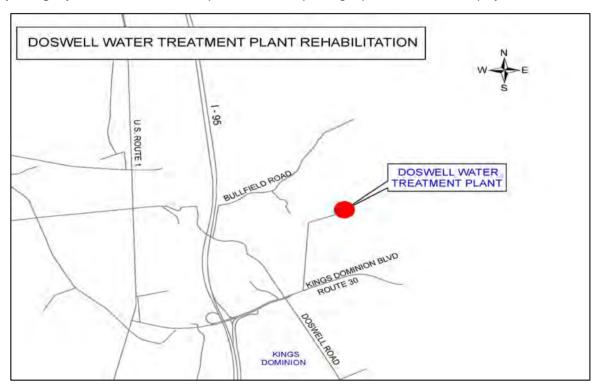
Location: Doswell Water Treatment Plant

Description: This project provides for the continuing funding to rehabilitate various equipment, structural

components and process enhancements at the Doswell Water Treatment Plant.

Useful Life: 5-35 years

Timetable: Design and Construction (FY15-FY18)



	FY14		FY15	FY16	FY17	FY18	Totals
Funding Sources							
User Fees	\$	- \$	75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 300,000
Total Sources	\$	- \$	75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 300,000
Funding Uses							
Professional Services	\$	- \$	7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 30,000
Construction		-	67,500	67,500	67,500	67,500	270,000
Total Uses	\$	- \$	75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 300,000

Functional Area: Public Utilities

Project: Atlee Road Waterline Improvement

Location: Along Atlee Road to Cool Spring Road

Description: This project provides for the FY14 construction of approximately 824' of 16" waterline along

Atlee Road extended to its proposed intersection with the "old" Cool Spring Road service road. This project will provide improved water distribution service for both domestic and fire suppression use in this mixed use area of the Lockwood Pressure Zone and is being done in

conjunction with the proposed DPW Atlee Road extension road improvement project.

Useful Life: 50 years

Timetable: Construction (FY14)



		FY14	FY15		FY16		FY17		FY18		Totals
Funding Sources											
User Fees	\$	214,000	\$	-	\$	-	\$	-	\$	-	\$ 214,000
Total Sources	\$	214,000	\$	-	\$	-	\$	-	\$	-	\$ 214,000
	-										
Funding Uses											
Construction	\$	214,000	\$	-	\$	-	\$	-	\$	-	\$ 214,000
Total Uses	\$	214,000	\$	-	\$	-	\$	-	\$	-	\$ 214,000

Functional Area: Public Utilities

Project: Route 360 at Bell Creek Road Waterline Improvements

Location: Across and along Route 360 at Bell Creek Road

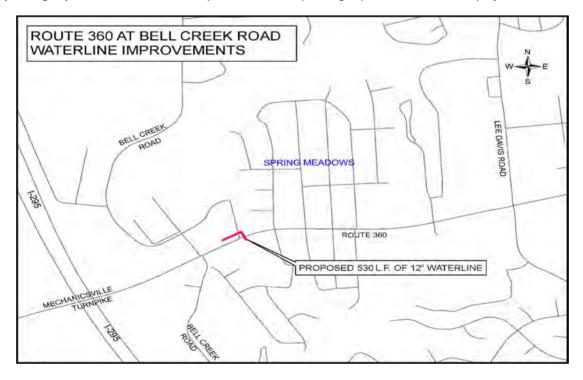
Description: This project provides for the FY15 construction of approximately 530' of 12" waterline across

and along Route 360 at Bell Creek Road. This project will provide improved water distribution service for both domestic and fire suppression use in this largely commercial area of the Lockwood Pressure Zone and is being done in conjunction with the proposed VDOT Route 360

Widening Project from I-295 to Wynbrook Lane.

Useful Life: 50 years

Timetable: Construction (FY15)



FY14			FY15		FY16			FY17			FY18			Totals
\$	-	\$	183,000	\$		-	\$		-	\$		-	\$	183,000
\$	-	\$	183,000	\$		-	\$		-	\$		-	\$	183,000
\$	-	\$	183,000	\$		-	\$		-	\$		-	\$	183,000
\$	-	\$	183,000	\$		-	\$		-	\$		-	\$	183,000
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Functional Area: Public Utilities

Project: Quarles Road Water Facility Rehabilitation

Location: Quarles Road Tank and Booster Station

Description: This project provides for the FY15 rehabilitation of the Quarles Road Tank and Booster Station

including:

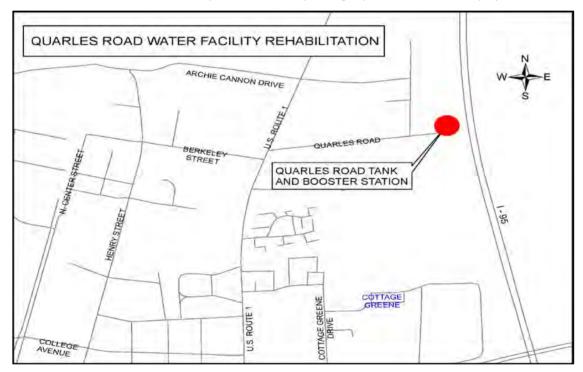
• chemical feed room addition

• new pumps

• replacement valves

Useful Life: 20-35 years

Timetable: Design and Construction (FY15)



	FY1	.4	FY15	FY16	FY17	,	FY18	Totals
Funding Sources								
User Fees	\$	- \$	162,000	\$	- \$	- \$	- \$	162,000
Total Sources	\$	- \$	162,000	\$	- \$	- \$	- \$	162,000
Funding Uses Professional	ć	ć	20,000	ć	Ċ	ć	ć	20,000
Services Construction	\$	- \$	20,000 142,000	Ş	- \$	- \$	- \$	20,000 142,000
Total Uses	\$	- \$	162,000	\$	- \$	- \$	- \$	162,000

Functional Area: Public Utilities

Project: Courthouse Water System Pump Station Improvements

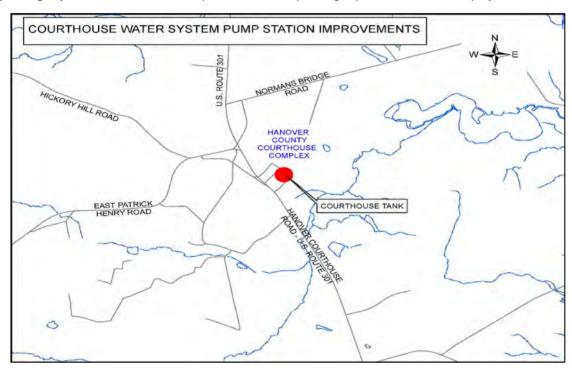
Location: Pamunkey Regional Jail Water Pump Station

Description: This project provides for modifications to pump piping, electrics and controls to enhance

metering, chemical feed, booster pump and fire pump operation capabilities.

Useful Life: 5-20 years

Timetable: Construction (FY17)



 FY14		FY15			FY16			FY17		FY18			Totals
\$ -	\$		-	\$		-	\$	150,000	\$		-	\$	150,000
\$ -	\$		-	\$		-	\$	150,000	\$		-	\$	150,000
\$ -	\$		-	\$		-	\$	150,000	\$		-	\$	150,000
\$ -	\$		-	\$		-	\$	150,000	\$		-	\$	150,000
\$ \$ \$	\$ -	\$ - \$ \$ - \$	\$ - \$ \$ - \$	\$ - \$ - \$ - \$ - \$	\$ - \$ - \$ \$ - \$ - \$	\$ - \$ - \$ \$ - \$ - \$	\$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ \$ - \$ - \$	\$ - \$ - \$ - \$ 150,000 \$ - \$ - \$ - \$ 150,000 \$ - \$ - \$ - \$ 150,000	\$ - \$ - \$ - \$ 150,000 \$ \$ - \$ - \$ - \$ 150,000 \$ \$ - \$ - \$ - \$ 150,000 \$	\$ - \$ - \$ - \$ 150,000 \$ \$ - \$ - \$ - \$ 150,000 \$ \$ - \$ - \$ - \$ 150,000 \$	\$ - \$ - \$ - \$ 150,000 \$ - \$ - \$ - \$ - \$ 150,000 \$ - \$ - \$ - \$ - \$ 150,000 \$ -	\$ - \$ - \$ - \$ 150,000 \$ - \$ \$ - \$ - \$ - \$ 150,000 \$ - \$ \$ - \$ - \$ - \$ 150,000 \$ - \$

Functional Area: Public Utilities

Project: Dianne Ridge Water Treatment

Location: Dianne Ridge Subdivision

Description: This project provides for the FY14 design and the FY15 construction for treatment of the well

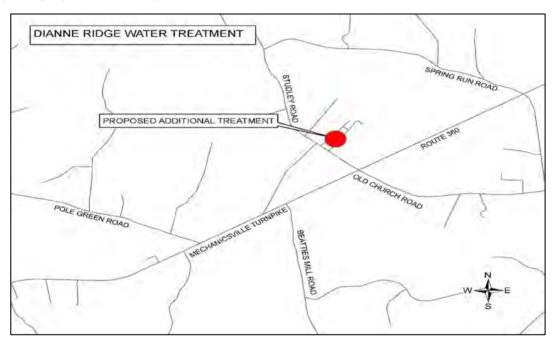
water for removal of gross alpha should levels increase beyond maximum contaminant level (MCL). The well water is in compliance with EPA/VDH regulations; however, levels have been increasing over the years. Sampling is required every three years and will be used to determine when or if the project is needed. Testing results that are above the MCL will trigger quarterly

sampling.

Useful Life: 30 years

Timetable: Design (FY14); Construction (FY15)

Operating Impact: \$3,000/year



	 FY14	FY15	FY16		FY17		FY18		Totals
Funding Sources User Fees	\$ 39,000	\$ 102,000	\$	_	\$	_	\$	_	\$ 141,000
Total Sources	\$ 39,000	\$ 102,000	\$	-	\$	-	\$	-	\$ 141,000
Funding Uses Professional Services	\$ 39,000	\$	\$	-	\$	-	\$	-	\$ 39,000
Construction	 -	102,000		-		-		-	102,000
Total Uses	\$ 39,000	\$ 102,000	\$	-	\$	-	\$	-	\$ 141,000

Functional Area: Public Utilities

Project: Georgetown Wellhouse Rehabilitation

Location: Georgetown Wellhouse

Description: This project provides for the FY16 rehabilitation of the Georgetown Wellhouse facility.

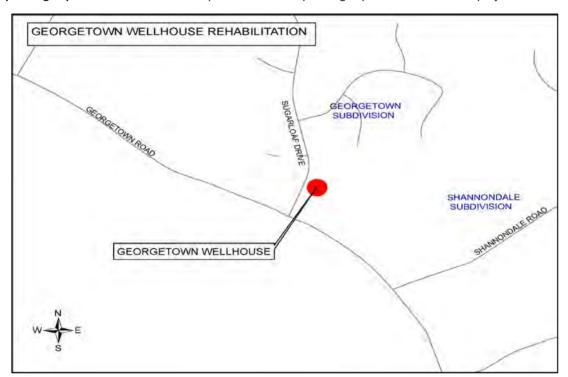
• chemical feed room addition

• new electrical service

• pipe and pump replacement

Useful Life: 20-35 years

Timetable: Design and Construction (FY16)



	FY14		F	Y15		FY16	FY17		FY18		Totals
Funding Sources											
User Fees	\$	-	\$		-	\$ 85,000	\$	-	\$	-	\$ 85,000
Total Sources	\$	-	\$		-	\$ 85,000	\$	-	\$	-	\$ 85,000
Funding Uses Professional Services	\$	-	\$		-	\$ 20,000	\$	-	\$	-	\$ 20,000
Construction		-			-	65,000		-		-	65,000
Total Uses	\$	-	\$		-	\$ 85,000	\$	-	\$	-	\$ 85,000

Functional Area: Public Utilities

Project: Race Course Street Waterline Improvements

Location: Along Race Course Street between Duncan Street and South Center Street

Description: This project provides for the FY14 design and construction of replacing 450' of 4" cast iron

waterline between Duncan Street and South Center Street with new 4" PVC. This project will

improve water quality and pressure.

Useful Life: 50 years

Timetable: Design and Construction (FY14)



		FY14	FY15			FY16			FY17			FY18			Totals
Funding Sources															_
User Fees	\$	70,000 \$		-	\$		-	\$		-	\$		-	\$	70,000
Total Sources	\$	70,000 \$		-	\$		-	\$		-	\$		-	\$	70,000
Funding Uses															
Professional	\$	10,000 \$		_	\$		_	\$		_	\$		_	\$	10,000
Services	Ÿ	10,000 φ			Υ			Y			Y			Y	10,000
Construction		60,000		-			-			-			-		60,000
Total Uses	\$	70,000 \$		-	\$		-	\$		-	\$		-	\$	70,000

Functional Area: Public Utilities

Project: Doswell Water Treatment Plant Basin Walkway and Loading Dock Rehabilitation

Location: Doswell Water Treatment Plant

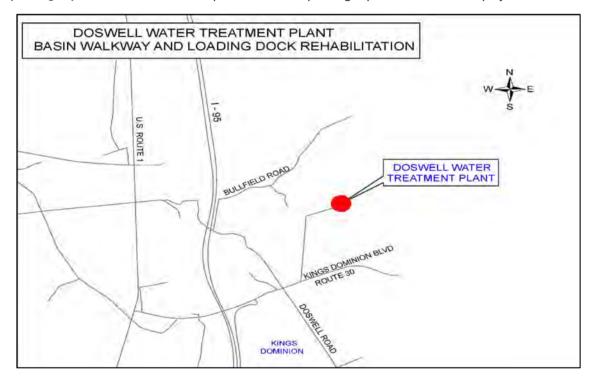
Description: This project provides for the FY14 repair and coating of the two walkways which run along the

sedimentation basins, the rehabilitation of the loading dock and replacement of the associated

railing.

Useful Life: 10-35 years

Timetable: Design and Construction (FY14)



		FY14	FY15			FY16			FY17			FY18			Totals
Funding Sources															
User Fees	\$	66,000	\$	-	\$		-	\$		-	\$		-	\$	66,000
Total Sources	\$	66,000	\$	-	\$		-	\$		-	\$		-	\$	66,000
Funding Uses															
Professional	¢	11,000	ς .	_	\$		_	Ś		_	\$		_	\$	11,000
Services	Y	11,000	Y		Ţ			Ţ			Y			Y	11,000
Construction		55,000		-			-			-			-		55,000
Total Uses	\$	66,000	\$	-	\$		-	\$		-	\$		-	\$	66,000

Functional Area: Public Utilities

Project: Totopotomoy Wastewater Treatment Plant Nutrient Improvements

Location: Totopotomoy Wastewater Treatment Plant

Description: This project consists of the FY14 replacement of the existing blowers, construction of two

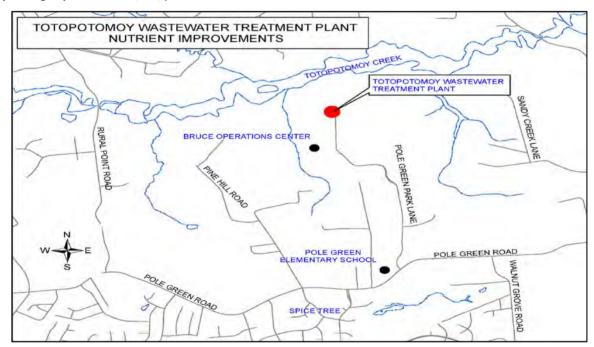
filters, and other miscellaneous improvements. The FY17 project consists of the addition of a

second influent step screen.

Useful Life: 20-50 years

Timetable: Design and Construction (FY14 & FY17)

Operating Impact: \$12,000/year



	FY14		FY15			FY16			FY17		FY18			Totals
\$	4,700,000	\$		-	\$		-	\$	250,000	\$		-	\$	4,950,000
\$	4,700,000	\$		-	\$		-	\$	250,000	\$		-	\$	4,950,000
ć	40E 000	ċ			ċ			ċ		ć			ć	405,000
Ş	403,000	Ą		-	Ş		-	Ş	-	Ą		-	Ą	403,000
	4,295,000			-			-		250,000			-		4,545,000
\$	4,700,000	\$		-	\$		-	\$	250,000	\$	•	-	\$	4,950,000
	\$ \$ \$	\$ 4,700,000 \$ 4,700,000 \$ 405,000 4,295,000	\$ 4,700,000 \$ \$ 4,700,000 \$ \$ 405,000 \$ 4,295,000	\$ 4,700,000 \$ \$ 4,700,000 \$ \$ 405,000 \$ 4,295,000	\$ 4,700,000 \$ - \$ 4,700,000 \$ - \$ 405,000 \$ - 4,295,000 -	\$ 4,700,000 \$ - \$ \$ 4,700,000 \$ - \$ \$ 405,000 \$ - \$ 4,295,000 -	\$ 4,700,000 \$ - \$ \$ 4,700,000 \$ - \$ \$ 405,000 \$ - \$ 4,295,000 -	\$ 4,700,000 \$ - \$ - \$ 4,700,000 \$ - \$ - \$ 405,000 \$ - \$ - 4,295,000	\$ 4,700,000 \$ - \$ - \$ \$ 4,700,000 \$ - \$ - \$ \$ 405,000 \$ - \$ - \$ 4,295,000	\$ 4,700,000 \$ - \$ - \$ 250,000 \$ 4,700,000 \$ - \$ - \$ 250,000 \$ 405,000 \$ - \$ - \$ - \$ - 4,295,000	\$ 4,700,000 \$ - \$ - \$ 250,000 \$ \$ 4,700,000 \$ - \$ - \$ 250,000 \$ \$ 405,000 \$ - \$ - \$ - \$ 4,295,000 250,000	\$ 4,700,000 \$ - \$ - \$ 250,000 \$ \$ 4,700,000 \$ - \$ - \$ 250,000 \$ \$ 405,000 \$ - \$ - \$ - \$ - \$ 4,295,000 250,000	\$ 4,700,000 \$ - \$ - \$ 250,000 \$ - \$ 4,700,000 \$ - \$ - \$ 250,000 \$ - \$ - \$ 250,000 \$ - \$ - \$ 250,000 \$ - \$ - \$ - \$ 250,000 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ 4,700,000 \$ - \$ - \$ 250,000 \$ - \$ \$ 4,700,000 \$ - \$ - \$ 250,000 \$ - \$ \$ 405,000 \$ - \$ - \$ - \$ - \$ - \$ 4,295,000 250,000 -

Functional Area: Public Utilities

Project: Henry Street Sewerline Rehabilitation

Location: Along Henry Street from College Avenue to Berkley Street

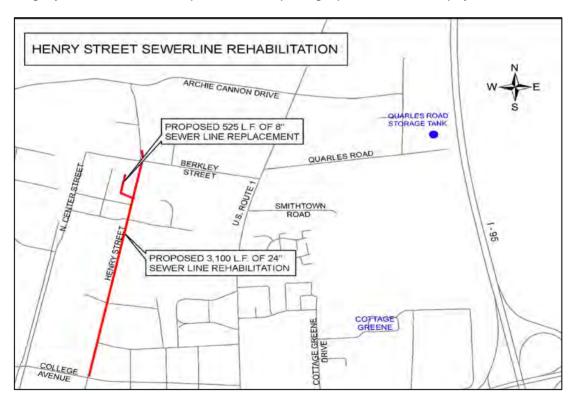
Description: This project provides for the FY13 design and FY14 construction necessary to rehabilitate the

Henry Street sewer main, which is one of the main trunk lines through the Town and into the Ashland Wastewater Treatment Plant. This main is approximately 3,100' in length and is 24" in diameter. This also includes the replacement of approximately 525' of 8" sewer that runs

parallel to this line in the rear yards north of A Street in the 600 block of Henry Street.

Useful Life: 50 years

Timetable: Construction (FY14)



	 FY14	FY15	FY16	FY17	FY18	Totals
Funding Sources						
User Fees	\$ 636,000	\$ -	\$ -	\$ -	\$ -	\$ 636,000
Total Sources	\$ 636,000	\$ -	\$ -	\$ -	\$ -	\$ 636,000
Funding Uses						
Construction	\$ 636,000	\$ -	\$ -	\$ -	\$ -	\$ 636,000
Total Uses	\$ 636,000	\$ -	\$ -	\$ -	\$ -	\$ 636,000

Functional Area: Public Utilities

Project: Ashland Sewerline Rehabilitation - Area 2

Location: Ashland Wastewater Treatment Plant drainage basin

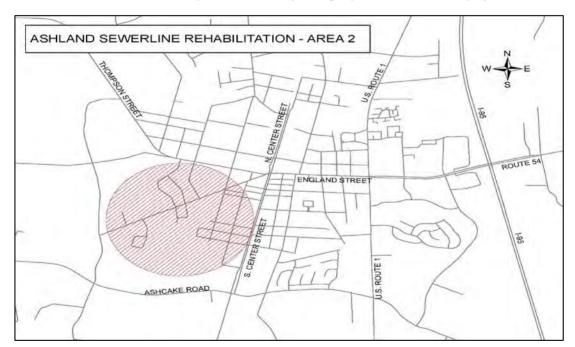
Description: This project provides for sewerline rehabilitation within the Ashland Wastewater Treatment

Plant drainage basin. This project consists of lining approximately 2,500' of pipe, installing approximately five point repair liners and repairing/sealing 40 lateral connections. These repairs are needed to correct structural defects in the sewer pipes and to reduce the volume of

inflow and infiltration to the sanitary sewer system.

Useful Life: 50 years

Timetable: Design and Construction (FY18)



	FY14		FY15			FY16		FY17			FY18		Totals
Funding Sources													
User Fees	\$	- \$		-	Ş		-	\$	-	Ş	532,000	Ş	532,000
Total Sources	\$	- \$		-	\$		-	\$	-	\$	532,000	\$	532,000
Funding Uses													
Professional Services	\$	- \$		-	\$		-	\$	-	\$	67,000	\$	67,000
Construction		-		-			-		-		465,000		465,000
Total Uses	\$	- \$		-	\$		-	\$	-	\$	532,000	\$	532,000

Functional Area: Public Utilities

Project: Ashland Wastewater Treatment Plant UV System Replacement

Location: Ashland Wastewater Treatment Plant

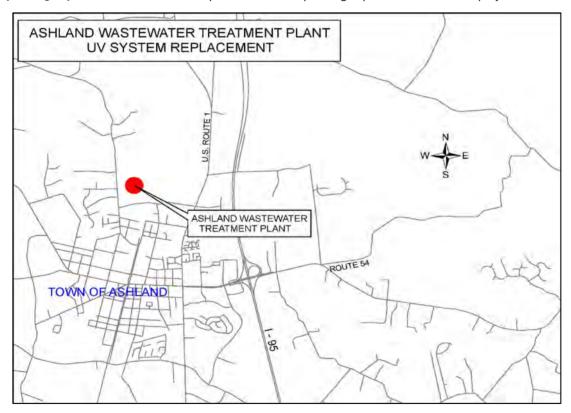
Description: This project includes the replacement of the existing UV disinfection system as the current

system has been discontinued. The manufacturer has indicated they are no longer supporting

this equipment.

Useful Life: 20 years

Timetable: Design (FY15); Construction (FY16)



	F	Y14	FY15	FY16	FY17		FY18		Totals
Funding Sources									
User Fees	\$	- \$	54,000	\$ 458,000	\$	- \$		-	\$ 512,000
Total Sources	\$	- \$	54,000	\$ 458,000	\$	- \$		-	\$ 512,000
Funding Uses Professional Services	\$	- \$	54,000	\$	\$	- \$		-	\$ 54,000
Construction		-	-	458,000		-		-	458,000
Total Uses	\$	- \$	54,000	\$ 458,000	\$	- \$		-	\$ 512,000

Functional Area: Public Utilities

Project: Doswell Wastewater Treatment Plant Equalization Tank Rehabilitation

Location: Doswell Wastewater Treatment Plant

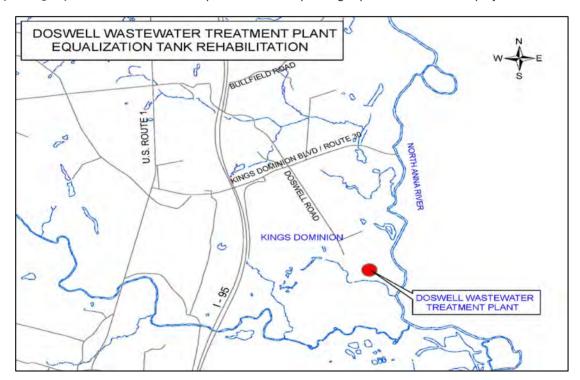
Description: This project consists of the FY17 rehabilitation and recoating of the two steel equalization

tanks. This includes cleaning, complete recoating of the interiors and spot repair and recoating

of the exteriors.

Useful Life: 20-35 years

Timetable: Design and Construction (FY17)



		Y14	FY15			FY16			FY17		FY18			Totals
Funding Sources User Fees	<u> </u>	- \$		_	ċ			\$	510,000	\$		_	¢	510,000
	<u>ې</u>	- 3			٠			٠	,	٠		_	٠	
Total Sources	Ş	- \$		-	Ş		-	Ş	510,000	Ş		-	Ş	510,000
Funding Uses Professional Services	\$	- \$		-	\$		-	\$	56,650	\$		_	\$	56,650
Construction		-		-			-		453,350			-		453,350
Total Uses	\$	- \$		-	\$		-	\$	510,000	\$	•	-	\$	510,000

Functional Area: Public Utilities

Project: Doswell Wastewater Treatment Plant UV System Replacement

Location: Doswell Wastewater Treatment Plant

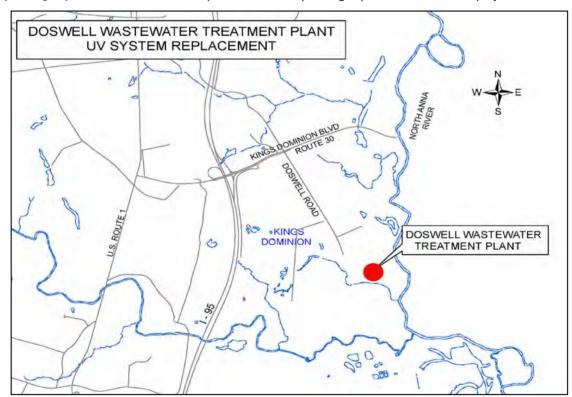
Description: This projects includes the replacement of the existing UV disinfection system as the current

system has been discontinued. The manufacturer has indicated that they are no longer

supporting this equipment.

Useful Life: 20 years

Timetable: Design (FY14); Construction (FY15)



	FY14	FY15	FY16		FY17		FY18		Totals
Funding Sources									
User Fees	\$ 40,000	\$ 340,000	\$	-	\$	-	\$	-	\$ 380,000
Total Sources	\$ 40,000	\$ 340,000	\$	-	\$	-	\$	-	\$ 380,000
Funding Uses Professional Services Construction	\$ 40,000	\$ - 340,000	\$	-	\$	-	\$	-	\$ 40,000 340,000
Total Uses	\$ 40,000	\$ 340,000	\$	-	\$	-	\$	-	\$ 380,000

Functional Area: Public Utilities

Project: Doswell Wastewater Treatment Plant Clarifier Weir and Baffle Replacement

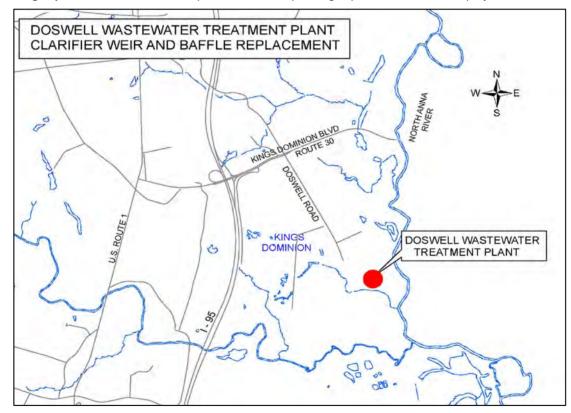
Location: Doswell Wastewater Treatment Plant

Description: This project provides for the replacement of the both clarifier weir and baffles along with the

effluent trough and wall coating.

Useful Life: 20 years

Timetable: Design (FY16); Construction (FY17)



	FY14		FY15		FY16	FY17	FY18		Totals
Funding Sources									
User Fees	\$	- \$		-	\$ 20,000	\$ 189,000	\$	-	\$ 209,000
Total Sources	\$	- \$		-	\$ 20,000	\$ 189,000	\$	-	\$ 209,000
Funding Uses Professional									
Services	\$	- \$		-	\$ 20,000	\$ -	\$	-	\$ 20,000
Construction		-		-	-	189,000		-	189,000
Total Uses	\$	- \$		-	\$ 20,000	\$ 189,000	\$	-	\$ 209,000

Functional Area: Public Utilities

Project: Ashland Sewerline Rehabilitation - Area 3

Location: Ashland Wastewater Treatment Plant drainage basin

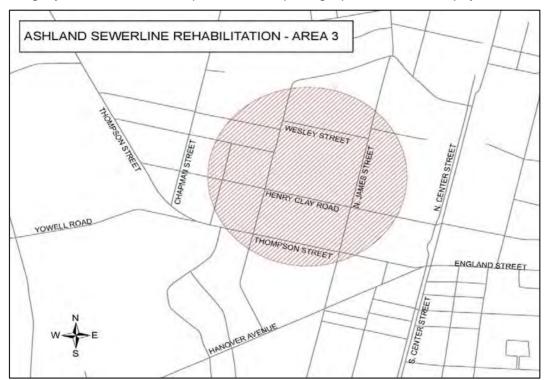
Description: This project provides for sewerline rehabilitation within the Ashland Wastewater Treatment

Plant drainage basin. This project consists of replacing approximately 350' of pipe, lining approximately 400' of pipe and repairing/sealing 15 lateral connections. These repairs are needed to correct structural defects in the sewer pipes and to reduce the volume of inflow and

infiltration to the sanitary sewer system.

Useful Life: 50 years

Timetable: Design and Construction (FY16)



	 FY14		FY15		FY16	FY17		FY18		Totals
Funding Sources										
User Fees	\$	- \$		-	\$ 202,000	\$	-	\$	-	\$ 202,000
Total Sources	\$	- \$		-	\$ 202,000	\$	-	\$	-	\$ 202,000
Funding Uses Professional Services	\$	- \$		-	\$ 29,000	\$	-	\$	-	\$ 29,000
Construction		-		-	173,000		-		-	173,000
Total Uses	\$	- \$		-	\$ 202,000	\$	-	\$	-	\$ 202,000

Functional Area: Public Utilities

Project: Beaverdam Wastewater Pump Station Control Panel

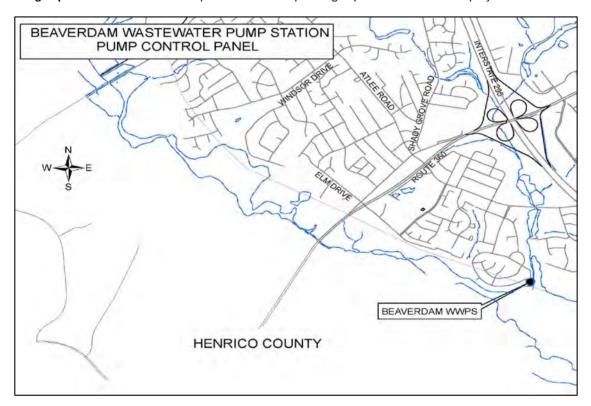
Location: Beaverdam Wastewater Pump Station

Description: The existing control panel has been in service since 2001 and will be near the end of its service

life at the time of replacement.

Useful Life: 10-20 years

Timetable: Construction (FY18)



	FY14	FY	15	FY16		FY17		FY18	Totals
Funding Sources									
User Fees	\$ -	\$	-	\$	-	\$	-	\$ 200,000	\$ 200,000
Total Sources	\$ -	\$	-	\$	-	\$	-	\$ 200,000	\$ 200,000
Funding Uses									
Construction	\$ - :	\$	-	\$	-	\$	-	\$ 200,000	\$ 200,000
Total Uses	\$ -	\$	-	\$	-	\$	-	\$ 200,000	\$ 200,000

Functional Area: Public Utilities

Project: Ashland Sewerline Rehabilitation - Area 1

Location: Ashland Wastewater Treatment Plant drainage basin

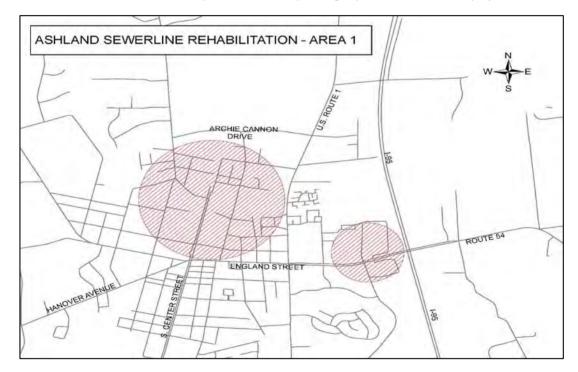
Description: This project provides for sewerline rehabilitation within the Ashland Wastewater Treatment

Plant drainage basin. This project consists of lining approximately 400' of pipe, installing approximately ten point repair liners and repairing/sealing 50 lateral connections. These repairs are needed to correct structural defects in the sewer pipes and to reduce the volume of

inflow and infiltration to the sanitary sewer system.

Useful Life: 50 years

Timetable: Design and Construction (FY14)



	FY14	FY15		FY16		FY17		FY18		Totals
Funding Sources										_
User Fees	\$ 191,000	\$	-	\$	-	\$	-	\$	-	\$ 191,000
Total Sources	\$ 191,000	\$	-	\$	-	\$	-	\$	-	\$ 191,000
Funding Uses										
Professional Services	\$ 27,500	\$	-	\$	-	\$	-	\$	-	\$ 27,500
Construction	163,500		-		-		-		-	163,500
Total Uses	\$ 191,000	\$ •	-	\$	-	\$ •	-	\$	-	\$ 191,000

Functional Area: Public Utilities

Project: Quarles Road Wastewater Pump Station Pump Replacement

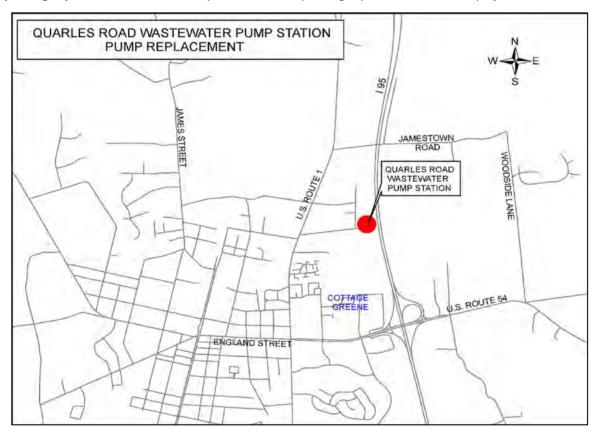
Location: Quarles Road Wastewater Pump Station

Description: This project provides for the replacement of the existing submersible pumps (installed in 1998).

In addition, these pumps are no longer supported by the manufacturer.

Useful Life: 20 years

Timetable: Construction (FY15)



	FY14		FY15	FY16		FY17		FY18		Totals
Funding Sources										
User Fees	\$	- \$	180,000	\$	- \$		- \$		- \$	180,000
Total Sources	\$	- \$	180,000	\$	- \$		- \$		- \$	180,000
Funding Uses										
Construction	\$	- \$	180,000	\$	- \$		- \$		- \$	180,000
Total Uses	\$	- \$	180,000	\$ •	- \$	•	- \$	•	- \$	180,000

Functional Area: Public Utilities

Project: Courthouse Sewage Treatment Plant Aeration Tank Rehabilitation

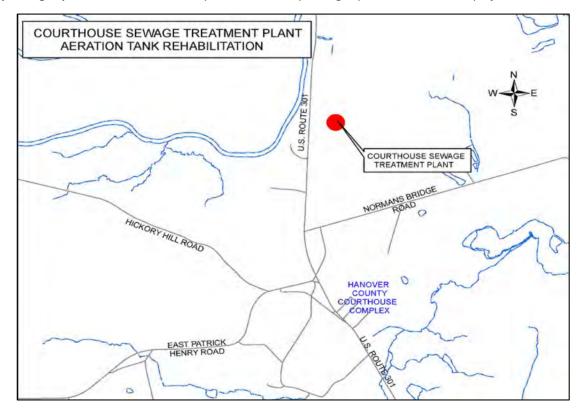
Location: Courthouse Sewage Treatment Plant

Description: This project provides for the recoating of aeration tanks, railings, piping and steel

appurtenances including blower pipe recoating. Annode replacement will also be included.

Useful Life: 20-35 years

Timetable: Design (FY14); Construction (FY15)



		FY14		FY15		FY16			FY17			FY18			Totals
Funding Sources															
User Fees	\$	18,000	\$	153,000	\$		-	\$		-	\$		-	\$	171,000
Total Sources	\$	18,000	\$	153,000	\$		-	\$		-	\$		-	\$	171,000
Funding Uses Professional Services Construction	\$	18,000	\$	- 153,000	\$		-	\$		-	\$		-	\$	18,000 153,000
Total Uses	\$	18,000	Ś	153,000	Ś		-	Ś			Ś		<u> </u>	Ś	171,000
. Otal Oscs	<u> </u>	10,000	Ψ	155,555	Ψ			Υ			Υ			<u> </u>	171,000

Functional Area: Public Utilities

Project: Ashland Wastewater Treatment Plant Polymer Control Panel

Location: Ashland Wastewater Treatment Plant

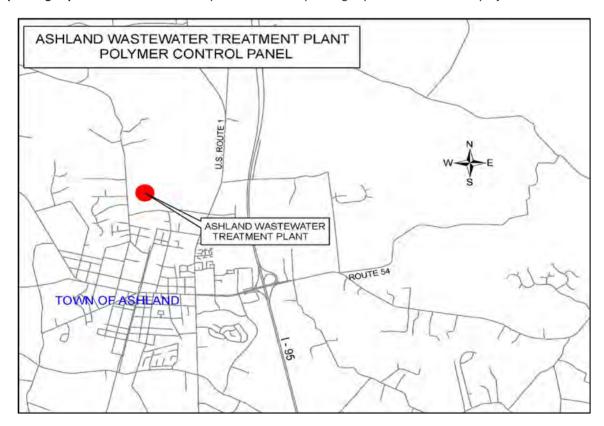
Description: This project provides for the replacement of the polymer feed panel located adjacent to the

belt press room at the Ashland Wastewater Treatment Plant. The panel has been in service

since 1992.

Useful Life: 20 years

Timetable: Construction (FY18)



	 FY14		FY15		FY16		FY17		FY18	Totals
Funding Sources										
User Fees	\$	-	\$	-	\$	-	\$	-	\$ 160,000	\$ 160,000
Total Sources	\$	-	\$	-	\$	-	\$	-	\$ 160,000	\$ 160,000
Funding Uses										
Construction	\$	-	\$	-	\$	-	\$	-	\$ 160,000	\$ 160,000
Total Uses	\$	-	\$	-	\$	-	\$	-	\$ 160,000	\$ 160,000

Functional Area: Public Utilities

Project: Totopotomoy Wastewater Treatment Plant UV Panel Replacement

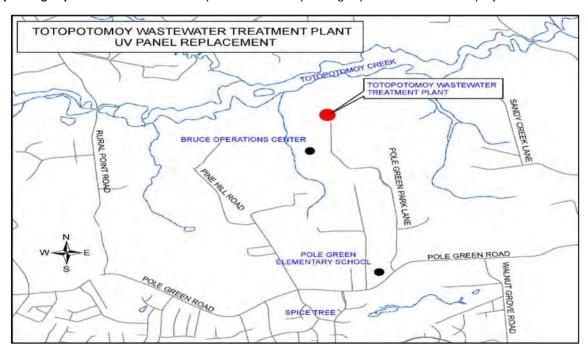
Location: Totopotomoy Wastewater Treatment Plant

Description: This project provides for the replacement of the UV control panels. The existing panel

components are no longer supported by the manufacturer.

Useful Life: 20 years

Timetable: Construction (FY15)



	FY14		FY15	FY16		FY17		FY18		Totals
Funding Sources										
User Fees	\$	-	\$ 142,000	\$	- \$		-	\$	-	\$ 142,000
Total Sources	\$	-	\$ 142,000	\$	- \$		-	\$	-	\$ 142,000
Funding Uses										
Construction	\$	-	\$ 142,000	\$	- \$		-	\$	-	\$ 142,000
Total Uses	\$	-	\$ 142,000	\$	- \$		-	\$ •	-	\$ 142,000

Functional Area: Public Utilities

Project: Ashland Wastewater Treatment Plant Annunicator Panel and Equalization Controller

Location: Ashland Wastewater Treatment Plant

Description: This project provides for the FY14 upgrade of the main plant annunciator panel and an

equalization controller at the Ashland Wastewater Treatment Plant.

Useful Life: 5-10 years

Timetable: Construction (FY14)



	FY14	FY15		FY16		FY17		FY18		Totals
Funding Sources										
User Fees	\$ 137,000	\$	-	\$	-	\$	-	\$	-	\$ 137,000
Total Sources	\$ 137,000	\$	-	\$	-	\$	-	\$	-	\$ 137,000
Funding Uses										
Construction	\$ 137,000	\$	-	\$	-	\$	-	\$	-	\$ 137,000
Total Uses	\$ 137,000	\$	-	\$	-	\$	-	\$	-	\$ 137,000

Functional Area: Public Utilities

Project: Doswell Wastewater Treatment Plant Digester Blowers and Enclosures Replacement

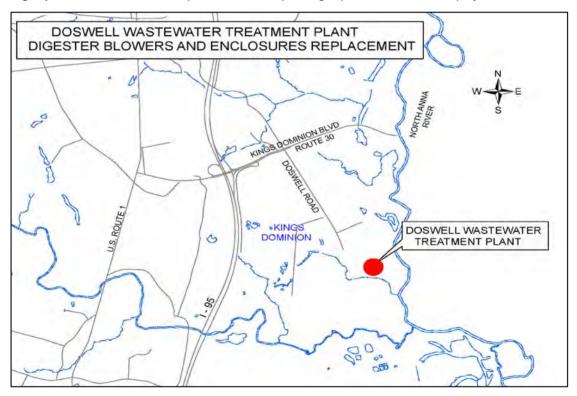
Location: Doswell Wastewater Treatment Plant

Description: The existing centrifugal blowers will be 25 years old at the time of replacement (installed in

1993). This project provides for the replacement in kind of both blowers.

Useful Life: 20 years

Timetable: Construction (FY18)



	FY14		FY15		FY16		FY17		FY18	Totals
Funding Sources										
User Fees	\$	-	\$	-	\$	-	\$	-	\$ 126,000	\$ 126,000
Total Sources	\$	-	\$	-	\$	-	\$	-	\$ 126,000	\$ 126,000
Funding Uses										
Construction	\$	-	\$	-	\$	-	\$	-	\$ 126,000	\$ 126,000
Total Uses	\$	-	\$	-	\$	-	\$	-	\$ 126,000	\$ 126,000

Functional Area: Public Utilities

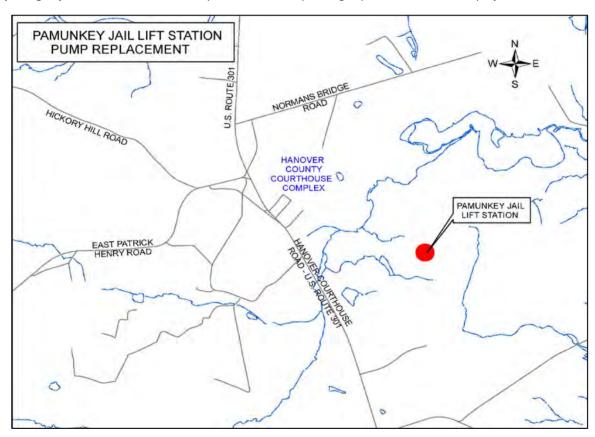
Project: Pamunkey Jail Lift Station Pump Replacement

Location: Pamunkey Jail Lift Station

Description: This project provides for the replacement of the existing submersible pumps (installed in 1998).

Useful Life: 20 years

Timetable: Construction (FY18)



		FY14		FY15			FY16			FY17			FY18		Totals
Funding Sources															
User Fees	\$		- \$		-	\$		-	\$		-	\$	122,000	\$	122,000
Total Sources	\$		- \$		-	\$		-	\$		-	\$	122,000	\$	122,000
Funding Uses															
Construction	\$		- \$		-	\$		-	\$		-	\$	122,000	\$	122,000
Total Uses	\$		- \$		-	\$		-	\$		-	\$	122,000	\$	122,000
Funding Uses Construction	\$ \$ \$ \$		- \$		-	\$ \$ \$		_	\$ \$ \$			\$ \$ \$	122,000	\$ \$ \$	122,

Functional Area: Public Utilities

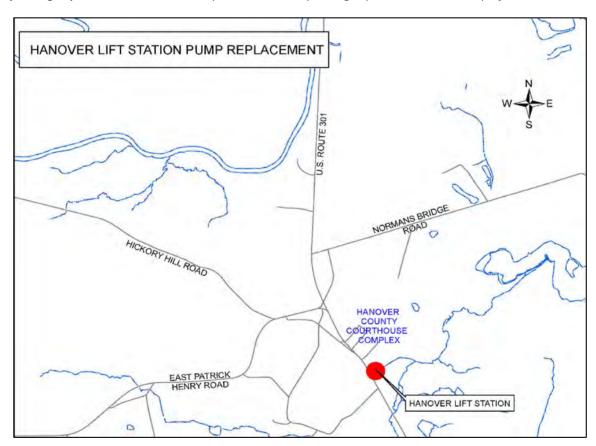
Project: Hanover Lift Station Pump Replacement

Location: Hanover Lift Station

Description: This project provides for the replacement of the existing submersible pumps (installed in 1997).

Useful Life: 20 years

Timetable: Construction (FY17)



	 FY14		FY15		FY16		FY17	FY18		Totals
Funding Sources										_
User Fees	\$	-	\$	-	\$	-	\$ 119,000	\$	-	\$ 119,000
Total Sources	\$	-	\$	-	\$	-	\$ 119,000	\$	-	\$ 119,000
Funding Uses										
Construction	\$	-	\$	-	\$	-	\$ 119,000	\$	-	\$ 119,000
Total Uses	\$	-	\$	-	\$	-	\$ 119,000	\$	-	\$ 119,000

Functional Area: Public Utilities

Project: Beaverdam Wastewater Pump Station Divider Gate Replacement

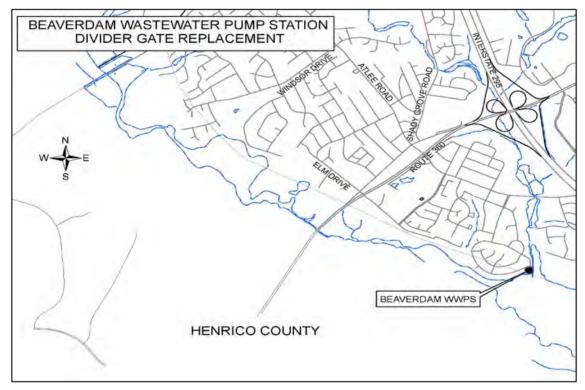
Location: Beaverdam Wastewater Pump Station

Description: The existing 30" divider gate has been in service since 1978. The gate is becoming increasingly

difficult to operate and is critical to the operation of the pump station.

Useful Life: 20-35 years

Timetable: Design and Construction (FY16)



		FY14		FY15			FY16		FY17			FY18			Totals
Funding Sources	<u> </u>														
User Fees	\$	-	\$		-	\$	93,000	\$		-	\$		-	\$	93,000
Total Sources	\$	-	\$		-	\$	93,000	\$		-	\$		-	\$	93,000
Funding Uses Professional Services Construction	\$	-	\$		-	\$	10,000 83,000	\$		-	\$		-	\$	10,000 83,000
	_					_	,	_			_				
Total Uses	Ş	-	Ş		-	Ş	93,000	Ş		-	Ş		-	Ş	93,000

Functional Area: Public Utilities

Project: Shelton Pointe Wastewater Pump Station Upgrade (FMP S59)

Location: Shelton Pointe Pump Station

Description: This project provides for the FY18 design and FY19 construction of an expansion of Shelton

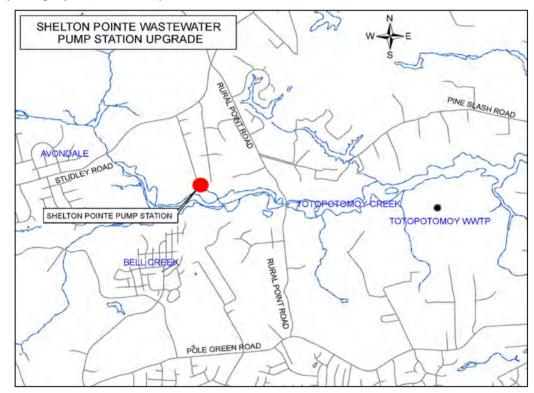
Pointe Wastewater Pump Station to peak capacity of 5.75 MGD through the installation of new

pumps to address growth.

Useful Life: 20 years

Timetable: Design (FY18)

Operating Impact: \$12,000/year



	 FY14		FY15		FY16		FY17		FY18	Totals
Funding Sources Professional Services	\$	-	\$	-	\$	-	\$	-	\$ 85,000	\$ 85,000
Total Sources	\$	-	\$	-	\$	-	\$	-	\$ 85,000	\$ 85,000
Funding Uses Professional Services	\$	-	\$	-	\$	-	\$	-	\$ 85,000	\$ 85,000
Total Uses	\$	-	\$	-	\$	-	\$	-	\$ 85,000	\$ 85,000

Functional Area: Public Utilities

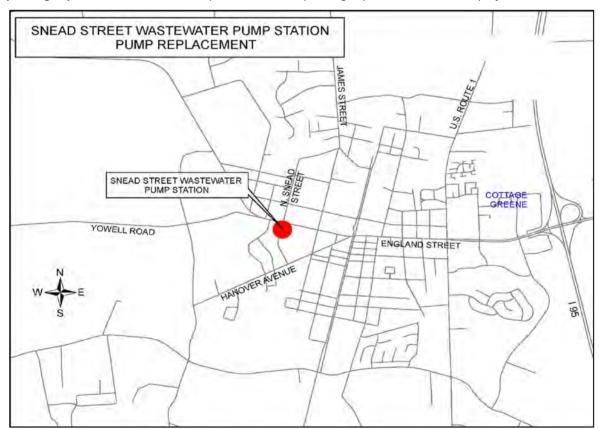
Project: Snead Street Wastewater Pump Station Pump Replacement

Location: Snead Street Wastewater Pump Station

Description: This project provides for the replacement of the existing submersible pumps (installed in 1995).

Useful Life: 20 years

Timetable: Construction (FY16)



	 FY14		F	Y15		FY16	FY17		FY18		Totals
Funding Sources											
User Fees	\$	-	\$		-	\$ 77,000	\$	-	\$	-	\$ 77,000
Total Sources	\$	-	\$		-	\$ 77,000	\$	-	\$	-	\$ 77,000
Funding Uses											
Construction	\$	-	\$		-	\$ 77,000	\$	-	\$	-	\$ 77,000
Total Uses	\$ •	-	\$		-	\$ 77,000	\$	-	\$	-	\$ 77,000

Functional Area: Public Utilities

Project: Air Park Wastewater Pump Station Generator Replacement

Location: Air Park Wastewater Pump Station

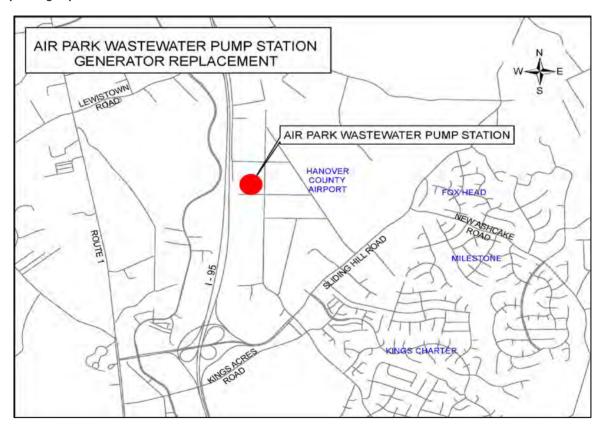
Description: The generator at the Air Park Wastewater Pump Station will have been in service for over 20

years and is nearing the end of its service life. Project includes design and construction to

replace the existing unit.

Useful Life: 20 years

Timetable: Design and Construction (FY17)



	FY14		FY15		FY16		FY17	FY18		Totals
Funding Sources User Fees	\$	- \$		-	\$	_	\$ 73,000	\$	-	\$ 73,000
Total Sources	\$	- \$		-	\$	-	\$ 73,000	\$	-	\$ 73,000
Funding Uses Professional Services	\$	- \$		-	\$	-	\$ 8,000	\$	-	\$ 8,000
Construction		-		-		-	65,000		-	65,000
Total Uses	\$	- \$		-	\$	-	\$ 73,000	\$	-	\$ 73,000

Functional Area: Public Utilities

Project: Ashland Wastewater Treatment Plant Belt Press Rehabilitation

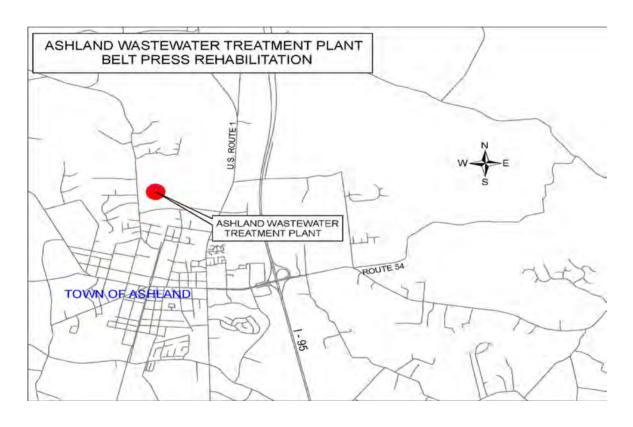
Location: Ashland Wastewater Treatment Plant

Description: The Ashland Wastewater Treatment Plant belt press has been in service since approximately

1992. This project provides for a complete overhaul of the unit.

Useful Life: 20 years

Timetable: Construction (FY15)



	FY1	4	FY15	FY16		FY17		FY18	;	Totals
Funding Sources										
User Fees	\$	- \$	69,000	\$	- \$		-	\$	-	\$ 69,000
Total Sources	\$	- \$	69,000	\$	- \$		-	\$	-	\$ 69,000
Funding Uses										
Construction	\$	- \$	69,000	\$	- \$		-	\$	-	\$ 69,000
Total Uses	\$	- \$	69,000	\$	- \$		-	\$	-	\$ 69,000

Functional Area: Public Utilities

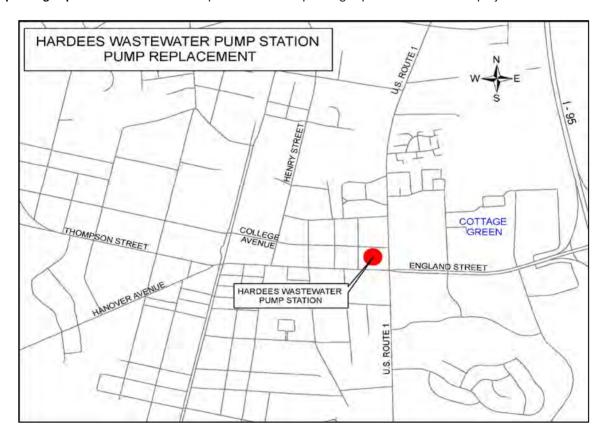
Project: Hardees Wastewater Pump Station Pump Replacement

Location: Hardees Wastewater Pump Station

Description: This project provides for the replacement of the existing submersible pumps (installed in 1995).

Useful Life: 20 years

Timetable: Construction (FY15)



	FY14		FY15	FY16	FY	17	FY18	Totals
Funding Sources								
User Fees	\$	- \$	59,000	\$	- \$	- \$	- \$	59,000
Total Sources	\$	- \$	59,000	\$	- \$	- \$	- \$	59,000
Funding Uses								
Construction	\$	- \$	59,000	\$	- \$	- \$	- \$	59,000
Total Uses	\$	- \$	59,000	\$	- \$	- \$	- \$	59,000

Functional Area: Public Utilities

Project: Vehicle Replacement

Location: N/A

Description: FY14 - \$62,000 Utility body truck (electrical/mechanical crew) (originally purchased in 2004)

FY14 - \$135,000 Dump truck replacement (originally purchased in 1999)

FY14 - \$350,000 Sewer vacuum/flush combination truck (collections crew) (originally purchased

in 2000)

FY18 - \$250,000 Sewer Flush Truck

Useful Life: 5-10 years

Timetable: Purchase vehicles (FY14 and FY18)

	FY14	FY15		FY16		FY17		FY18	Totals
Funding Sources									
User Fees	\$ 547,000	\$	-	\$	-	\$	-	\$ 250,000	\$ 797,000
Total Sources	\$ 547,000	\$	-	\$	-	\$	-	\$ 250,000	\$ 797,000
Funding Uses									
Vehicles	\$ 547,000	\$	-	\$	-	\$	-	\$ 250,000	\$ 797,000
Total Uses	\$ 547,000	\$	-	\$	-	\$	-	\$ 250,000	\$ 797,000

Functional Area: Public Utilities

Project: Equipment Replacement

Location: N/A

Description: FY15 - \$81,000 Vacuum excavator replacement (originally purchased in 2001)

FY15 - \$90,000 Backhoe replacement (originally purchased in 1997)

FY17 - \$59,000 Diesel powered portable pump to be used as backup at large sewer lift stations

& treatment plants

Useful Life: 10-20 years

Timetable: Equipment replacement (FY15 and FY17)

	FY14		FY15	FY16		FY17	FY18		Totals
Funding Sources									
User Fees	\$	-	\$ 171,000	\$	-	\$ 59,000	\$	-	\$ 230,000
Total Sources	\$	-	\$ 171,000	\$	-	\$ 59,000	\$	-	\$ 230,000
Funding Uses									
Equipment	\$	-	\$ 171,000	\$	-	\$ 59,000	\$	-	\$ 230,000
Total Uses	\$	-	\$ 171,000	\$	-	\$ 59,000	\$	-	\$ 230,000